

BRIDGING TIMES AND SPACES

Papers in Ancient Near Eastern, Mediterranean and
Armenian Studies

Honouring Gregory E. Areshian
on the occasion of his sixty-fifth birthday



edited by

Pavel S. Avetisyan
Yervand H. Grekryan

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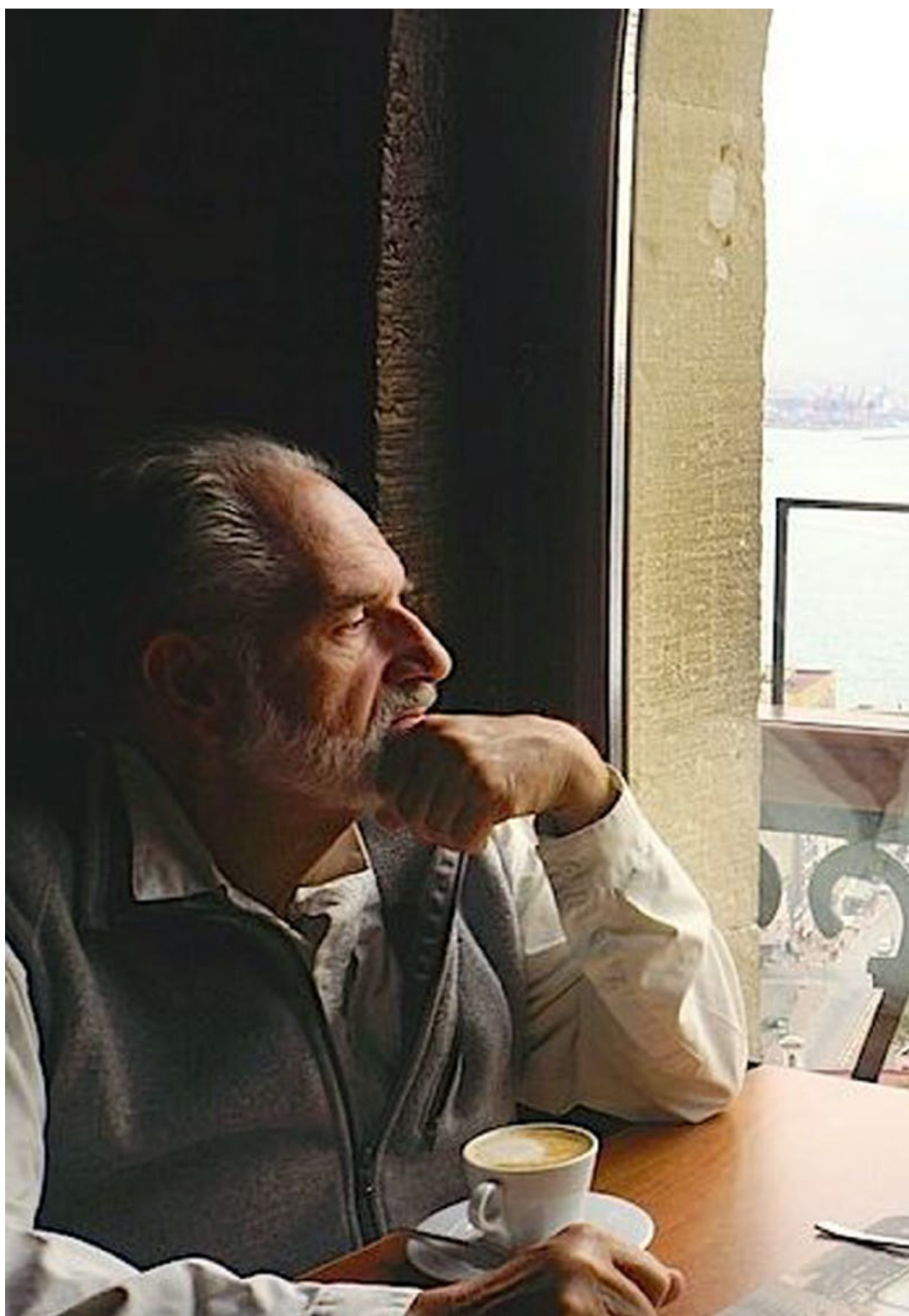
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Front cover illustration: Altar, ca. 1500-1400 BCE, Karashamb Cemetery, Armenia.

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Gregory E. Areshian

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Foreword

The remarkable professional career of Gregory E. Areshian spanning over four and a half decades is unique in several respects. Living through different societal orders in the course of those years he proactively accumulated an experience stemming from very contrasting intellectual, cultural, sociopolitical, and, one even could say, civilizational traditions. His childhood in Armenia was spent in an atmosphere of reverence for world cultural heritage and was surrounded by marvelous archaeological and historical sites, and architectural monuments of Near Eastern civilizations. Thus, it is hardly surprising that he became deeply enamored with Bronze Age fortresses and tombs, Urartian citadels and cuneiform inscriptions, medieval castles and monasteries scattered over the beautiful natural landscapes of Armenia. His interests took him for graduate studies to Saint Petersburg, the two-century-old kernel of Near Eastern, Classical, and Asian studies in Russia and the former Soviet Union. From there Gregory Areshian embarked on a life-long fieldwork covering different areas from the Eastern Mediterranean to Central Asia, which was combined with continuous inquiries into theories and methodologies of social sciences and the humanities. Some of his colleagues from the USA qualified him as an anthropological historian who has been conducting archaeological fieldwork throughout most of his life. Such a characterization captures the essence of Gregory Areshian's academic activities, which consistently demonstrate successful efforts to counterbalance the overspecialization of knowledge by a development of interdisciplinary studies. His constant concern about the societal impact of science and cultural heritage prompted him to occupy several governmental positions, which produced a number of remarkable results. Spending half of his academic life in the Soviet Union and the Republic of Armenia and another half in the USA, teaching and researching at leading universities and other scientific institutions, currently Professor Areshian shares his knowledge and experience with the students of the American University of Armenia, enthusiastically engaging them, together with his colleagues from different countries, into new visionary research projects. Gregory Areshian's colleagues, disciples, and students created this volume on the occasion of his 65th birthday as a tribute to his academic achievements and the editors are delighted by the opportunity of presenting it to the readers.

Pavel S. Avetisyan
Yervand H. Grekyan
YEREVAN, FEBRUARY 2017

Of Pathways Taken and Not Taken: between Archaeology, History, and Interdisciplinarity

An Interview with Gregory E. Areshian
Conducted by Levon H. Abrahamian and Emily Uyeda Kantrim

Levon H. Abrahamian (hereafter, LHA): Any interview starts from the beginning, and, as in your case, from the beginnings of a scholar with a scientific pedigree, not just family roots. Everything is based on how something had started. What was the first thing that provoked your interest in antiquity?

Gregory E. Areshian (hereafter, GEA): When I was about five years old, I would go down to the basement of our house and watch my grandfather, a professor at the medical school in Yerevan and the director of the first maternity hospital in Armenia, in his big carpenter's workshop in the late afternoons after his work. There was a part of a large shallow bowl of polished basalt stone. 'Grandpa, where did it come from?' and he said it was from Karmir Blur and that the director of the excavations gave it to my grandfather as a token of gratitude after his son was born in my grandfather's hospital. 'You will meet him someday.' It was the first time I heard the name of Karmir Blur and the first time I touched an archaeological artefact. And after that, it actually went quite fast.

The next summer we had a visit from the director of the excavations at Karmir Blur, Boris B. Piotrovsky, at that time the Director of the Leningrad Branch of the Institute of Archaeology of the Academy of Sciences of the USSR, who from 1964 until his death in 1990 was the Director of the Hermitage Museum in Leningrad (presently Saint Petersburg). Later he became my mentor and the supervisor of my graduate work and dissertation devoted to the interdisciplinary study of the social environment of the Ancient Near Eastern ironworking. He used to come and visit with my grandparents and parents at our house almost every year. In the summer of 1960, he invited me, a fourth grader, to participate in the excavations. Every day at dawn, I would take my lunch bag, and wait for the knock on the door from Piotrovsky's young graduate student Stepan A. Yesaian, big and tall, who had recently returned from military service and still wore his heavy army boots. It was around the time when the Institute of Archaeology and Ethnography of the National Academy of Sciences of Armenia was founded under the leadership of Babken Arakelian, an archaeologist, classicist, and medievalist.

It was a uniquely propitious moment for the takeoff of studies in archaeology, ancient history, linguistics, Near Eastern, and classical studies in Armenia, which sprang from a crossing of several intellectual and sociopolitical pathways. Khrushchev's thaw loosened the iron grip of Stalinist communist ideology on these areas in social sciences and the humanities, which were considered politically less dangerous to the regime than philosophy, modern history, economics, sociology, and jurisprudence, which, from the perspective of the Communist Party of the Soviet Union, required more control and censorship. At the same time several notable professors in history and linguistics, who got their education before World War I in Germany, France, and Imperial Russia, and barely survived the murderous Stalinist purges, still were teaching after World War II at Yerevan State University. It was their undergraduate students who went on to pursuing their graduate education in Saint Petersburg/Leningrad, whose Pre-Soviet intellectual traditions attracted young students and mature scholars alike from all over the Soviet Union. Most of them, such as Harutyun Martirosyan, Gagik Sarkisian, Nikolay Harutyunian, Gevorg Tiratsian, Hrach Bartikian, Zohrab Ghasabyan, and others returned to Yerevan and, occupying different academic positions in ancient Near Eastern studies, archaeology, as well as in ancient and medieval history, continued at the same time their work as members of the team excavating Karmir Blur, the 7th century BCE city of Teishebanini that was the center of the Urartian Empire in the Plain of Ararat. The Karmir Blur project, like a magnet, attracted different scholars; among those of international stature I can particularly recall Igor M. Diakonov, who published the cuneiform tablets from the excavations, and Giorgi A. Melikishvili, the author of the first comprehensive corpus of the Urartian cuneiform inscriptions. I continued working at Karmir Blur through the end of the excavations in 1971, when I was already in my graduate studies under Piotrovsky in Saint Petersburg. There was a small old three-room dig house built for processing the finds and safekeeping them until the end of the season, when they were transferred to the State Museum of History of Armenia. Vahrich Gazazian, conservator from the Museum of History, would do the preliminary

conservation of the exquisite Urartian metalwork in the dig house, the discovery of which was partially responsible for Karmir Blur's international renown. He and ceramics conservator Arevshatyan brought those wonderful artefacts to the condition that you can now see at the museums in Yerevan. The process of finding these artefacts was really cool. It was that kind of coolness, which was the first factor that attracted me to archaeology. Yet, I soon realized that Piotrovsky's efforts were putting Armenia on the world map of historical studies, provoking an international interest toward the study of the Urartian civilization.

The second factor that brought me into archaeology was my fascination with ancient warfare. As a little boy, I read whatever I could get my hands on, starting with French history for kids in French in my grandparents' library, *France, son Histoire*, by George Montorgueil, illustrated by JOB, published in Paris around 1895. There were stories of Roman legions moving with the leadership of Julius Caesar into Gaul, the dramatic surrender of Vercingetorix at Alesia, and the Hundred Year's War, whose French knights in their heavy armour were sinking in mud at the battle of Crécy where they were all shot by English yeoman archers standing on top of a ridge and armed with longbows. The fascination with this subject led my five-year old self to refuse toys and my weekly allowance. I told my parents to save the money and I was saving my own coins, rubles, and kopeks in my piggy bank, saying that we were all saving for my own set of knight's armour. In Soviet Yerevan this was an impossible task! So it ended up that the three of us went together to the Stanislavski Theater on Abovian Street where the master tailor, who was making the costumes and the armour for Shakespeare's Richard III, measured me for my own cuirass, helmet, and a sword. I am still interested in the logic of the moving forces behind warfare, how warfare has affected life throughout history, how people use warfare even today. This also drove my interest toward modern history and I read whatever I could get concerning the French Revolution and Napoleonic times, but already in the sixth grade, while taking the class in Soviet history, I realized that living in the USSR and expressing an iconoclastic opinion about modern history will be physically hazardous to my future. So, I stayed with my passion for archaeology, languages, and ancient history, returning to my interests in exploring and teaching world history only after moving to the USA in 1993.

LHA: Your last book, *Empires and Diversity: on the Crossroads of Archaeology, Anthropology, and History* (2013), impressed me very much. I am interested in knowing how your approach to archaeology, culture, and history developed and changed with the passage of time, how abruptly or how smoothly?

GEA: If you glance at my list of published works, not to mention the majority of my manuscripts that I have not yet published, you'll see that less than half of those are based on traditional approaches toward archaeological research, i.e. conducting fieldwork and studying the sites, artefacts, and assemblages found in the course of that fieldwork. That doesn't mean that I didn't like archaeological surveys and excavations, just it happened that fieldwork oftentimes made me seek answers to historical and anthropological questions. As an undergraduate student working at Karmir Blur, I had observed both the discovery of evidence reflecting major events in the history of the site, and debates concerning the interpretation of that evidence. One of the debates that, reignited from time to time, continues till the present concerns the violent destruction of the imperial citadel-palace of Teishebaini. The stratigraphy revealed an enormous conflagration which coincides with other traces of enemy assault and battle, and three distinctly different assemblages of weapons have led to three possible hypotheses, which suggested that Teishebaini was destroyed

- (a) by Scythian invasion, or
- (b) in the course of a rebellion of the local population of the Armenian Highland and South Caucasus against the Urartian imperial domination, or
- (c) during the conquest of Armenia by the Medes sometime near the end of the 7th century BCE.

Out of the three, today, the latter hypothesis advanced by I. M. Diakonov, is my favored. The scope of this interview does not allow to further elaborate on the downfall of Teishebaini, but these recollections draw a sketch of the intellectual environment that initially shaped my views concerning the study of human past. Around the same time (i.e. 1970-71) I read two papers published by Gordon Willey and Philip Phillips (1958) and Lewis Binford (1962), which ushered the period of infatuation with a particular kind of structural functionalism perceived as system analysis and processualism in American (and not only American) archaeology and the development of theoretical foundations of anthropological archaeology. The latter, following the motto 'Archaeology is anthropology or it is nothing' has been continuing its glorious march into the future, notwithstanding the fact that this motto distorted Willey and Phillips' original statement 'American archaeology is anthropology or it is nothing' by omitting the adjective 'American.' At Karmir Blur I already faced two realities. The first is that, differently from the situation in the Americas, most of archaeology in the Old World, from China in the east to the Mediterranean in the west, is historical archaeology, and the second is that the epistemological uniqueness and special value of archaeology includes interpretive reconstructions of clusters of specific historical events

on the basis of their tangible remains, regardless of whether we can derive their ancient names and descriptions from written texts or not. My view does not downgrade the importance of anthropology, rather it puts anthropology on par with the importance of historical investigation in what concerns archaeology. Moreover, the unbreakable epistemological link between archaeology and history is revealed in the fact that archaeological evidence creates the possibility of long-term perspectives of evolutionary pathways of human societies, but only by deducing those long-term processes and patterns of change from singular historical events reconstructed through an analysis of their tangible remains. But so does the work of historians: from the time when Fernand Braudel articulated his concept of *longue durée* in opposition to what François Simiand defined as ‘evental history’ (*histoire événementielle*) the central epistemological question that arises equally before archaeological and historical studies is: how can major sociocultural changes be causally explained from interactions of individual historical events? Thinking about the sameness of that central question faced by archaeologists and historians one can readily observe that the process of archaeological reconstruction of historical-anthropological snapshots of people’s lifeways usually covers specific clusters of interconnected singular events, allowing oftentimes to address the matter of causality. But, long before getting to my current point of understanding the complex relationship between archaeology, history, and anthropology, I found out a truism known to many before me: that in the process of interpretive reconstruction archaeology cannot rely exclusively on the knowledge and experience accumulated through its own methods of fieldwork and has to imply social processes described by historians and anthropologists and hypothetical models derived from those observations.

LHA: So, your interest in multidisciplinary approaches originated that early?

GEA: Yes, indeed. At Karmir Blur I witnessed not only a productive interaction between archaeologists and philologists aimed at historical interpretations, but also the work of botanists studying charred grape seeds found in the enormous palatial wine cellars and semi-digested grasses and flowers retrieved from the charred stomach of a cow that died in the conflagration engulfing the palace. There were zoologists studying animal remains and geologists identifying different semi-precious stones used by ancient jewellers (In those years such specialized areas of scholarship as archaeozoology, archaeobotany, or geoarchaeology were just emerging). Boris Piotrovsky himself was a multidisciplinary oriented scholar: bringing together specialists and graduate students in different sciences

and humanities he assumed the task of reconstructing a big picture of the Urartian civilization through multidisciplinary synthesis.

So, the topic that I had explored in my Ph.D. dissertation also emerged as an outcome of multidisciplinary approach. Fascinated by the interactions of two technological systems of ironworking represented by the Urartian imperial production on the one hand and by the manufacturing of iron in the local kingdoms of the central Near Eastern highlands conquered by the Urartian Empire from the late 9th through the first half of the 7th centuries BCE – on the other, I broadened my research question in order to seek answers in a bigger picture and longer-term processes. In short, that ‘big question’ was: how come that the knowledge of ironworking discovered by coppersmiths and jewellers in major centres of Ancient Near Eastern craftsmanship (Sumer, Akkad, Central Anatolia) around the middle of the 3rd millennium BCE did not develop into a separate full-scale industry of iron and steel production until the end of the 2nd and beginning of the 1st millennium BCE, ushering the coming of the Iron Age? Answering such a socio-historical and anthropological question focused me on interdependencies between societal and technological developments. I obviously could not limit myself to a descriptive-comparative analysis of archaeological artefacts. I had to delve deeper into the history of technology and in the archeometallurgy of iron, but this too was clarifying only one of the aspects of the same question. A study of multiple references to iron in Sumerian, Babylonian, Hittite, and Homeric texts viewed in connection to specific archaeological assemblages and particular groups of finds was the next logical step. Historically and anthropologically it was curious to find out that ironworking on a small scale has been known in the Ancient Near East for more than a millennium, but it was ‘dormant,’ until the decline and collapse of more or less stable Bronze Age empires and smaller states in the 12th century BCE, followed by the rapid increase in militarization of smaller scale societies during the following ‘Dark Ages’ and decline of international trade relations, which hurt the tin trade, had created a new social demand that ended in the spread of mass production of weaponry made of steel. And it was not by accident that the two most powerful empires of the Ancient Near East that emerged during the 9th century BCE out of the chaos of the ‘Dark Ages’ – the Neo-Assyrian state and Urartu-Biainili rose on the foundations created, among few other major factors, by state-managed ironworking.

Talking about multidisciplinary one readily can find out that the three, nowadays very fashionable and obviously interrelated terms: multidisciplinary, interdisciplinary, and transdisciplinarity had been used interchangeably until roughly 2000. Even today

there is no consensus regarding the epistemological distinctions between the definitions of these three terms, although in recent years a substantial progress is noticeable in that direction, especially in biomedical literature. The central research question of that quest is: how can we reintegrate disciplinary knowledge under conditions that different disciplines have the same object of inquiry. My take on this matter (and I'm not claiming being original) is that multidisciplinary inquiry can be defined as a process of aggregation of knowledge created about same objects by different disciplines. Interdisciplinarity is more proactive, since it is problem-oriented: it brings together the data, approaches, and results, obtained by different disciplines, and redirects those toward the solution of a specific problem. Meanwhile, transdisciplinarity is an application of a singular theory and methodology across disciplinary borders. In this respect my Ph.D. dissertation could have been characterized as an inquiry developing from a multidisciplinary aggregation of data toward the development of a particular interdisciplinary theory.

Simultaneously, i.e. in the course of the 1970s I was consumed by two other research endeavours, the first of which expanded and, more or less, organized my thinking about multidisciplinary and interdisciplinarity, whereas the second demanded multidisciplinary approaches toward the solution of particular research problems. The first was caused by the organization of an advanced research seminar for the study of culture by the late Edward S. Markarian, Chair of the Department of Theory of Culture at the Institute of Philosophy of the National Academy of Sciences of Armenia. Both Markarian and that seminar have had a major intellectual impact on my generation of then young scholars in the Social Sciences and the Humanities of the Soviet Union. Both you and I, having studied in Moscow and Saint Petersburg, which was followed by a continuation of our academic careers in Armenia, remember that Markarian opened many people's minds to a variety of western social theories, both non-Marxist and Marxist. Already before that seminar my research was informed by different archaeological theories, some German and French philosophy, works by Malinowski, Marc Bloch, Collingwood, and Leroi-Gurhan, but Markarian's seminar and my later long-term collaboration with him and Sergey Arutyunov of the Moscow Institute of Ethnography had substantially expanded my knowledge of the Anglophone social and cultural anthropology.

LHA: That seminar, as well as Markarian's work in general, were in essence devoted to the development of culturology, which I understand as a particular branch of the humanities and social sciences, different from cultural anthropology.

GEA: Indeed, culturology and cultural anthropology, initially stemming from a single source, which was the deep interest in the overwhelmingly encompassing, enormous phenomenon of activities that made the humans who they are (Ostwald being the godfather of culturology and Boas – of cultural anthropology), had soon diverged very substantially, the first evolving in the direction of cultural studies, while the second, until the last few decades, had predominantly focused on preindustrial societies. But my interests toward the study of human culture had intuitively referenced the broad variety of concepts and theories concerning culture to my research in history and archaeology. So, several fundamental characteristics of culture have begun quite soon dominating the horizon of my intellectual quest. First rose my interest in cultural typology, naturally followed by my adherence to the principle of holism, out of which emerged an exploration of the general systems theory that gradually has been transforming into not so deep a study of different dynamic systems theories, complexity theories, and their possible applications to historical and archaeological studies. Taking this evolving intellectual pathway naturally meant that it would be keeping me within the paradigm of interdisciplinary studies.

Emily Uyeda Kantrim (hereafter, EUK): You mentioned that in the course of the 1970s your research mostly included three endeavours: the study of the social forces shaping the development of the Ancient Near Eastern metallurgy, forays into theories and methodologies of the social sciences and the humanities, and what was the third?

GEA: The third was my actual archaeological fieldwork informed by those theoretical and methodological musings. The excavations at Mokhrablur near Ejmiadzin in the Ararat Plain were the most important field project that I conducted from 1970 through 1977. Besides a large number of important archaeological finds, it yielded three significant implications. First, a group of young archaeologists and students has learned the difficult intricacies of excavating and recording multi-layered mudbrick architecture forming a *tell*, which was the first such experience in Armenia. Second, a stratified regional chronology for the early and middle parts (ca. 3400/3300-2600 BCE) of the Early Bronze Age Kura-Arax archaeological culture/horizon/archeocultural unity was established. Third, a monumental cultic tower dating back to ca. 3000-2900 BCE was discovered at the centre of the settlement, which remained for several decades the oldest edifice of monumental architecture known from the Caucasus, until the discovery in 2009 of the monumental cultic mudbrick tower dating back to the middle of the 6th millennium BCE at the site of Kyamiltepe in the Mill Steppe of Azerbaijan by Barbara Helwing and her colleagues. The discovery of

the Mokhrablur tower-temple focused my attention on the exceptionally diverse and abundant cultic paraphernalia of the Kura-Arax culture reflecting a complex system of myths and related rituals – a topic that to the present is a subject of my research musings.

EUK: Which leads to the next question: looking at the bibliography of your scholarly works of more than 160 titles published in twelve countries in five languages, one easily can notice that about one-quarter of those are devoted to the study of Indo-European, Ancient Near Eastern, Greco-Roman, and Caucasian mythologies and rituals; did your interest in ancient myths and cultic ceremonies emerge while you were exploring the Mokhrablur Temple?

GEA: No, actually it started much earlier, emanating from two beautifully written books in Russian, both of which I requested of my parents for my own little library when I was in the fourth grade. I had read them several times by the time I reached the ninth grade. Soviet Assyriologist Lev Lipin and prose-writer, journalist A. Belov wrote *The Books of Clay*, from which I learned about the *Epic of Gilgamesh*, the *Enuma Elish*, Babylonian demons, and Neo-Assyrian monsters, oracles and black magic. The other book, *Legends and Myths of Ancient Greece*, was written by Russian historian, classicist, and educator Nikolay A. Kun, and first published in 1914, then reprinted multiple times during the Soviet and post-Soviet times and translated into several European languages. It is noteworthy that this book, following a one to two page-long highly enjoyable, emotionally charged text recounting a particular myth or legend and written for junior-high school students, gave references to specific works by Greek and Roman authors, thus enticing students to continue reading original texts in translation, yet hoping that one day they would study Ancient Greek and Latin.

Yet, it was only from the early 1980s that the reconstruction and analysis of ancient myths and rituals became for me a serious pursuit and will remain as such into the foreseeable future. Not surprisingly, it started from inductive observations in the field, where from 1978 through 1987 I was excavating kurgans (barrows) – burial mounds and cultic monuments, which were erected by mobile pastoral societies of the earlier part of the Middle Bronze Age (ca. 2400/2300-1850/1750 BCE) in the central Near Eastern highlands. Such sites, especially if little disturbed and meticulously excavated and recorded, tell us amazing stories about the rituals of their creators, and rituals are intrinsically linked to several aspects of myths (and sometimes legends) and mutually reinforce one another in those aspects, as demonstrated by Walter Burkert, although I think that such reinforcement happens at the apex of their connections when ritualistic actors believe

that they participate to the mythic story by recreating it. In such cases rituals can be viewed as materialized myths. Otherwise myths can develop in literature and disseminated through different kinds of media without connection to ritualistic performances and rituals could be carried on by traditions when the associations with myths are forgotten.

In spite of the multitude of research approaches and developed theories, the study of myths, with only few notable exceptions, has become a disciplinary pursuit deeply grounded in the analysis of written texts and natural languages by folklorists, linguists, philologists, and anthropologists. So, the disciplinary integration and specialization in that area was very much conditioned by the written nature of sources explored by scholars from different backgrounds and by the subject of their exploration, which is myth. Archaeologists and art historians, since the work of Winckelmann, also carried out a large number of forays into the study of myths and religions, but, all things considered, it is surprising that this enormously vast area of research rarely had transcended the borderlines between multidisciplinary and interdisciplinarity. For example, art-historical evidence has been used for illustrative purposes in multidisciplinary analyses of written texts. Meanwhile archaeologists oftentimes kept deriving interpretations of individual signs that they have been finding (for example on pottery, in petroglyphs, etc.) from superficial analogies (e.g. wavy line may signify ‘water,’ but also ‘river,’ six to eight or more short straight lines radiating from one centre ubiquitously are interpreted either as ‘star,’ or ‘sun,’ or, as in the linguistically verifiable case of the Late Uruk protoliterate writing – ‘sky’). In this case an interdisciplinary focus on the problem doesn’t help much in the matter of verification of interpretations. Thus, I assumed that only a singular methodology developed from an adequate theory that could work both with verbal and non-verbal signs, as well as with combinations of those into sign-sequences and patterns of such sequences would allow for a deeper analysis, reconstruction, and interpretation. Such methodology had to work across disciplines, thereby transforming the research enterprise from interdisciplinary into transdisciplinary. This naturally made me think about applying principles of textual semiotics, since, in general, semiotics studies signification and systems of signs crossing the boundaries of media through which meaning is conveyed. I gave preference to semiotics over hermeneutics, because the first is more empirical-inductive and transdisciplinary than the second. At first, my thinking was informed by Charles Morris’ works whose subdivision of semiotics into semantics, syntactics, and pragmatics epistemologically still looks very powerful, and by Raymond Barthes’ analysis of creation of mythologies in modern societies with his

particular attention to visual media and development of text semiotics. I juxtaposed their ideas with the insightful works by Vladimir Toporov and Vyacheslav Ivanov on the reconstruction of Proto-Indo-European and Proto-Slavic mythological texts, which predominantly were based on linguistic data with an inclusion of some folkloric records and historical written texts. Soon after that I saw the opportunity of integrating different approaches of these scholars and applying this integral transdisciplinary perspective to a vast amount of existing art-historical, archaeological, folkloric, and linguistic data with the purpose of reconstructing a number of lost ritual-mythological texts at the level of mythological metatexts. Here I should mention that my view of mythological metatext is slightly similar to the definition of metatext suggested in the area of literary criticism by Gerard Genette. I think of a mythological metatext as a probabilistic inference about formerly existent and demonstrable clusters of semantically, syntactically, and narratively interrelated signs, which can be judged as ritual-mythological by analogy with known mythological texts. Taking such a transdisciplinary path of exploration I suggested several reconstructive interpretations of specific ritual-mythological practices from Indo-European, Ancient Near Eastern, and Greco-Roman traditions. That included an exploration and reconstruction of the Proto-Indo-European zoomorphic encoding of the ritual-mythological metatext of the birth-death-resurrection cycle, a metatextual interpretation of the Indo-European mythological imagery presented by the Middle Bronze Age artistic silverware from the Caucasus, a reconstruction of Greco-Aryan (if not Proto-Indo-European) metatexts as sources of some myths concerning Herakles, and a number of other essays in the same field.

Nowadays archeozoology, archeobotany, and biological/physical anthropology (a part of which is also referred to in the USA under a logically confusing name of bioarchaeology) also can and should contribute important ancillary information to the reconstructions of rituals and myths, however, that information cannot be used directly for such reconstructions, or for any immediate inferences concerning ancient rituals: firstly it has to be included into an archaeological depositional analysis, and only after that interpreted within the framework of textual semiotics. But this is an enormous area for future work that cannot be completed by few scholars within a generation.

LHA: You developed a new chronology for the Bronze and Iron age sites of Armenia and the Caucasus, which is cited on and on for more than twenty years by now, and most archaeologists specializing in this geographic region say that this is your most important scholarly contribution. But, simultaneously with

your chronological investigations you also suggested several new periodizations, and not only in the field of archaeology but also for regional history, and, especially, Armenian history. How do you assess today your work on chronologies and periodizations, which you have been continuing for decades?

GEA: First of all, let me emphatically state that establishment of chronologies and construction of periodizations pursue essentially different goals, are based on different theories, and are achieved through different methods. It is truly surprising that many people don't see the fundamental, clear-cut distinction between the two.

Putting it in a simple way, chronology is identification of the position of an event on the arrow of time, or within cyclical time, it's a tool of orientation in time, like a GPS device that identifies our position in space. Our daily, weekly, monthly, and annual planners are chronological arrangements of our thoughts, intents, and actions. People cannot exist without more or less accurate chronologies. Therefore if we want to study any event or process in the past, or forecast the continuation of their sequence into the future, we must start with the establishment of a chronology. In the case of my research, I brought arguments ascertaining the chronological position of the Early Iron Age in the Caucasus, reversed the previous chronologies of Middle Bronze Age assemblages, and revised the dates of the beginning of the Early Bronze Age, pushing it back by three to four centuries into the second half of the fourth millennium BCE. Construction of periodizations is essentially different: its about discovery, analysis, and interpretation of parameters of dynamic sociocultural systems, and, therefore, its all about social systems research. Construction of periodizations have specific heuristic goals, it is problem-oriented toward the discovery and interpretation of systemic sociocultural interaction and change. Therefore same events and dates may become components of different periodizations, depending on the research goals pursued in a specific system's analysis. Chronologies are built of relative or absolute dates fixed in time, whereas periods almost always overlap one with another.

LHA: During the last decades new major archaeological finds were made in Armenia, some of them sensational, and you have played a leading role in some of those discoveries. How is your current theoretical work, including your research concerning chronology and periodizations, informed by those discoveries? A question that you and I have discussed many times at conferences and meetings is whether Armenia, the Armenian Highland, is part of Caucasia, or rather broader Asia, Eurasia, Eastern Mediterranean, or of the Near East?

GEA: This is a very important question. The Armenian Highland, which was first described and defined by German geographers in the first half of the 19th century as a separate geographic entity approximately corresponding to the central part of the Near Eastern highlands, extends from the Kura River valley in the north to the Eastern Taurus mountains in the south, thus forming the northern edge of Mesopotamia, and from the Upper Euphrates in the west to the northern Zagros in the east, geographically always was a northern part of the Middle East. But this fixed geographic environment most of the time did not correspond exactly to the political, cultural, and ethnic formations that existed on its territory in the long course of regional history. Here we will leave aside the discussion of a very interesting phenomenon of how and why millions of people, including thousands of intellectuals, think that the exonyms *Armenia* and *Armenian/Armenians* are identical with the endonyms *Hayq/Hayastan* and *hay/hayer* without a serious historical exploration of the causes of difference between these endonyms and exonyms and just took it for granted. To the best of my current knowledge, there has been only one *a priori* interpretation of this dichotomy within the framework of the old and obsolete theory of the ‘ethnogenesis of the Armenian people’ stating that these two names originated from two ‘tribal’ groups that occupied different parts of the Armenian Highland, which had conflated in the process of that ‘ethnogenesis.’ This conclusion never was supported neither by empirical evidence nor by reasonable analogies. The political-territorial discrepancies between *Hayq/Hayastan* and *Armenia* during some historical periods are truly startling, with the latter being from time-to-time substantially larger than the former. So, for example, according to the Persian Achaemenid inscriptions, in the third quarter of the 6th century BCE the country of Armenia occupied an enormous territory from Media (today’s central part of western Iran) in the east to Cappadocia (today’s central Turkey) in the west, and to Assyria in the south, but an ethnographically detailed description left to us by Xenophon who marched through the territories of the same Achaemenid Empire two centuries later unambiguously indicates that, within that territory, the area occupied by ethno-culturally Armenians identifiable with the ethnonym *hay* extended from the right bank of the Eastern Euphrates (today’s Murat-Su) in the south to include the Plain of Erzurum in the north, i.e. only about half the size of the country called *Armina* in the Achaemenid Behistun inscription. This definitively tells us that, speaking of any phenomenon, any reality, we must be historically specific.

At the same time, viewing the history of the Armenian Highland and Armenia on macro-, i.e. regional and continental scales, one can readily observe that the

destiny of Armenia and Armenians heavily depended on those macro-scale changes. So, your question: to which sociocultural universe belongs Armenia begs the answer that during different periods of its history it belonged to different sociopolitical and cultural worlds. Herewith, the problem of periodization of history, in this particular case, of macro-periodization of Armenian history naturally rises again. In the last three-to four decades of historical studies issues of periodization mainly were a concern of world historians, while periodizations on regional and macro-regional scales were seldom addressed. Certainly, the sociopolitical and cultural contents of specific periods were debated, such as whether Sasanian Iran belongs to the world of Late Antiquity, or how meaningful is the concept of the Axial Age. But is it theoretically and methodologically reasonable to discuss the particularities and generalities of a specific period without viewing it within a framework of a broader, internally coherent system of periodization that includes multiple periods? The answer will be a resounding ‘no.’

The studies in Armenian history are not an exception. There have been four, more or less widespread periodizations of Armenian history, the first one ending around the 420s CE and reflecting the political-historical worldview of the last representatives of the royal house of Armenian Arsacids. The *Armenian History* of Movses Khorenatsi was structured around that three-partite periodization. This was the only periodization mostly derived from the reverberations of mythological narratives and legendary and actual events of Armenian history. The other three periodizations followed by the historians of the 19th and 20th centuries had no grounds in the pivotal times of the Armenian past and were based on concepts developed outside the Armenian historical realities. The first of those, still largely used nowadays, was borrowed from the tripartite periodization of history developed by 15th century historian-humanists of the Italian Renaissance Leonardo Bruni and Flavio Biondo, who subdivided history into Ancient, Medieval (Dark Ages), and their own Modern/Renaissance times. Such subdivision was de-facto rejected already by the historical writing of the European Enlightenment in the second half of the 18th century (e.g. by Edward Gibbon), but it was brought into the Armenian historiography more than a century after Gibbon via the works of Russian-Soviet historians. Modern Armenian historians never have made the argument why a periodization developed specifically for the history of Italy by Renaissance thinkers should become the cornerstone for the study of Armenian history.

The second of the three ‘modern’ periodizations was the outright Marxist-Stalinist concept of ‘pyatizm’ (five-ism) that in essence required the acceptance of

the teleological concept of the unilinear progress of humankind materialized throughout five consecutive ‘social-economic formations,’ beginning with the imagined egalitarianism of the ‘noble savage’s’ primitive society and consecutively followed by slavery-based societies, feudalism, capitalism, and culminating in communism (with its first stage manifested by socialism), which will bring the ultimate happiness to humankind and will become the ‘logical end’ of history. This pseudo-scientific ‘periodization’ was dictated to the historians of the Soviet Union and, later – of the Soviet Block and also imposed under the threat of political persecution upon those Armenian historians who were subjects of that political system from the second half of the 1930s through the 1950s and later, first in a very brutal, and later in a more subtle manner. I also was subjected to such a ‘subtle’ political pressure by being considered ‘unfit for foreign travel’ until 1985, after I published a lengthy paper in the *Jahrbuch für Wirtschaftsgeschichte* in 1977, in which I attempted to demonstrate that complex stratified societies existed in the Armenian Highland before the ‘slave-ownership based’ kingdom of Urartu – an idea that was deemed ‘destabilizing’ to the ‘only scientifically true’ theory of ‘pyatizm.’

Finally, the third periodization, more or less widespread in the modern Armenian nationalistic historical writing is based on the presence or absence of the ‘Armenian statehood’ throughout history. The foundational concept of this periodization was derived from common views characteristic of all nationalistic historiographies and does not have much to do with specificities of the Armenian historical reality. Moreover, the features, typologies, and hierarchies of polities that existed in Armenia have not been comprehensively and systemically analyzed and interpreted, but only studied from case to case.

Since no generalizing work dealing with human past can be successfully created without an adequate periodization containing a heuristic capacity, I have been musing on a periodization of Armenian history for quite a while. Talking briefly about this project that still is in progress, I must start with stating that by using the qualifier *Armenian* I do not mean the Armenians as a people, i.e. as *hayer*, nor Armenia as a country or the geographic territory of the Armenian Highland, but both in their togetherness, i.e. in a way that the adjective *hayots* (‘Armenian’) was understood by Movses Khorenatsi, yet without forgetting that these two also need to be treated separately under many certain circumstances, such as in the case of the above mentioned discrepancy between the endonym and the exonym, or in the studies of the Armenian diaspora, or in the researches concerning the histories of those societies and social groups that were not ethnically

Armenian but acted within the geographic limits of the Armenian Highland, etc. My periodization of Armenian history is derived from three foundational principles:

- (1) it can be developed only for a timeframe represented by consecutive and more or less representative datasets;
- (2) it must reflect the specificity of Armenian history and be primarily based on Armenian sources (i.e. sources from Armenia and its neighbourhood), and not be an implantation of those periodizations, which were developed on different historical scales and for other historic-geographic areas, such as the three aforementioned periodizations;
- (3) since each period must reflect and characterize a socio-historic system with its features and dynamics and become a heuristic tool for causal explanation, the periodization as a whole must be constructed on the basis of essential ideas explored in dynamical and complex adaptive systems theories, such as bifurcation points, structural stability, nested character/hierarchy of systems, adaptive relationships between micro structures aimed at survivability of macrostructures, catastrophic failures, system memory, etc.

Some preliminary results of this work I recently presented at the Annual General Meeting of the National Academy of Sciences of Armenia. I’m fully aware that a lot of intuition and subjectivity are involved in connecting my limited knowledge of systems theories with the data pertaining to the Armenian historical past, yet I think that a presentation even of raw conclusions may lead to a constructive dialogue regarding this topic, which is critically important for the future development of Armenian Studies. The epistemological problems that I’m struggling with in developing this periodization reside in incommensurability between some of the systems theories and the limits of their applications to socio-historical reality. At this stage of research, I identify six macroperiods within the periodization of Armenian history, numbered from 0 to 5. Each of the macroperiods could and should be subdivided into smaller periods and this periodization needs to be correlated with other, broader periodizations of regional history. Macroperiod 0 is introduced because of the methodological requirement of the first foundational principle: today representative consecutive series of datasets cover the last 6000 years of history of the inhabitants of the Armenian Highland, i.e. from ca. 4000 BCE. All earlier data are unified under the rubric ‘Macroperiod 0,’ since there still are major chronological gaps between the datasets dating before 4000 BCE. For example, we do not yet have sufficient archaeological remains from the long timespan between the end of the Late Neolithic that ended ca. 5500 BCE and the Late Chalcolithic that begun ca. 4200-4000

BCE. The introduction of Macroperiod 0 implies that it should be replaced by a number of macroperiods in the foreseeable future. This is how the new periodization of Armenian history looks at the current stage of its development:

Macroperiod 0 – pre ca. 4000 BCE.

Macroperiod I – ca.4000 BCE - ca. 820/810 BCE. is characterized by an endogenous rise of complex societies from clusters of sedentary agricultural communities and communities of mobile pastoralists to the formation of confederations of kingdoms, it corresponds to the timespan from the Late Chalcolithic through the Early Iron Age in archaeological terms and subdivides into several very different periods.

Macroperiod II – ca. 820/810 BCE - 34 BCE includes two endogenously formed empires in the Armenian Highland, the theocratic empire of Urartu/Biainili, followed by the Median-Achaemenid and Post-Achaemenid interlude, and the Hellenistic Artaxiad (Artashesian) Empire of Great Armenia.

Macroperiod III – 34 BCE – 1071 CE may be named the macroperiod of borderland centrality of Armenia, starting with the establishment of a new inter-civilizational political, economic, and cultural frontier between the Roman Mediterranean and the Iranian world, later substituted by the Byzantie-Islamic (Umayyad and Abbasid) frontier. This frontier was not only a line of military conflicts, but also a belt of active economic interactions, in which the buffer zone consisting of the Caucasus, Armenia, Northern Mesopotamia, and the Levant had played a central role, wherefrom I suggested the term of ‘borderland centrality’ for Armenia. This macroperiod ended abruptly, overnight in 1071, when, losing its inter-civilizational borderland position after the battle of Manazkert (Manzikert), Armenia fell within the realm of Eurasian empires of nomadic origin.

Macroperiod IV –1021-present can truly be called the period of the diasporization of Armenians, which started with the exodus of the Armenian military-political elites of the Kingdom of Van-Vaspurakan, followed by a substantial part of its population, and has been continuing through the last two decades of the 20th and beginning of the current centuries. Although, until 1820s diasporization was the most salient feature of this ongoing macroperiod, several internal periodizations could be constructed within it in order to address different research agendas.

Macroperiod V – ca. 1800-present distinctively overlaps with Macroperiod IV displaying at the same time several socio-historical countertrends

developing against the trend of diasporization of the preceding macroperiod. The most salient feature of this macroperiod of Armenian history is the re-creation of the industrialized Armenian nation-state within the framework of accelerating globalization. With regard to the territory of Armenia and its population Macroperiod V can be squarely identified with the Modern period in world history, which seems to be coming to its end.

The periodization of Armenian history is now one of the focal points of my interest. Periodization has to become one of the cornerstones for historical interpretation. Without solid theoretical and methodological grounds for periodization, you cannot even write elementary history textbooks for school children. We need to develop, discuss, and debate a number of periodizations derived from different systemic criteria and constructed on different scales, pursuing a variety of research goals, in order to lay down new foundations for the Armenian post-nationalistic historical writing.

My more particular research, including archaeological fieldwork that you mentioned, has been developing in close connection with my work on constructing productive periodizations. Indeed, in the last two decades we have witnessed a decidedly more substantial advancement in sociocultural understanding of the Macroperiod I (Late Chalcolithic to Early Iron Ages) than in the interpretations of the Macroperiods III and IV, which cover all of the Late Antiquity and so-called ‘Middle Ages’ of the presently obsolete periodization. These recent discoveries prompt us to reassess the whole dynamics of early social complexity, which attests at a specific pathway of that process in the Armenian Highland and allows postulating a similar pathway for a number of other areas in the Near Eastern highlands. The more or less traditional focus of studies in early social complexity conducted by anthropologists and archaeologists has been on the growth of vertical social hierarchies within individual societies or groups of similar societies. Recent discoveries in Armenia suggest that under the conditions of ecological diversity of the Armenian Highland it is also necessary paying special attention to studies of ‘horizontal,’ or geographic social complexity, which was shaped by economic and cultural interactions, as well as by power relationships between agricultural communities, hunter-gatherers, mobile pastoralists, tribal societies, early kingdoms, and empires from the Late Neolithic to the Iron Age (Macroperiods 0-II). Especially telling are the discoveries of the Areni-I Cave Project that I had the pleasure to co-direct with Boris Gasparyan and Ron Pinhasi. Many people around the globe have heard about Armenia for the first time, learning from the news disseminated by the *National Geographic* concerning the discovery in that cave complex of the world’s oldest wine press dating back to ca. 6100 years before present, and of the

oldest leather shoe dating back to the second quarter of the fourth millennium BCE. The qualifier 'world oldest' most probably won't excite archaeologists and anthropologists as much as the new insights into the development of culture and social complexity derived from these findings. Indeed, viticulture and viniculture require a much broader and deeper knowledge of agriculture (cycles of irrigation, pruning, fighting mildew and phylloxera, protecting from frost, probably propagating from cuttings, etc.) and wine production (minimum knowledge of crushing, fermentation, and stabilization) than tilling of soil with a digging stick or hoe and sowing seeds of wheat, barley, or foxtail millet practiced by the early farmers of the Old World Neolithic. Even more amazing about Areni-1 is that it was a ritual complex related to funerary practices. Wine production in the cave was designated for those ritual purposes, as were other finds connected to funerary rituals performed by Late Chalcolithic communities.

Other exciting research carried out by both Pavel Avetisyan and myself on separate occasions concerns cycles of cultural integration and differentiation from the Late Chalcolithic to the Early Iron Age. Several such cycles have been identified, such as the occurrence of exceptional diversity of cultural traditions during the Late Chalcolithic, followed by unifying processes during the Early Bronze age Kura-Arax civilization (ca. 3400/3300-2400/2200 BCE), which, in its turn, was followed by cultural fragmentation during the Middle Bronze Age.

LHA: You spoke about empires of Armenia, and recently you published a work concerning the efforts to shape the Armenian national identity during the attempt of creating an Armenian nation-state in Late Antiquity. Where do you see the emergence of Armenians as a people, an ethnicity in your periodization? Where will Armenians, their origins be placed in your very interesting model? In the Kura-Arax civilization? At the beginning of the Iron Age? With the breakup of the Proto-Indo-European linguistic unity?

GEA: Where are the Armenians in the periodizations that I have presented? This pretty much depends on how we understand and define the Armenians. Ethnicities or 'peoples' are neither 'imaginary communities' as some folks would like to think, nor groups of people that emerged in the process of so-called 'ethnogenesis' and afterwards remain in an immutable condition, as it is most of the time implied by nationalistic historians. And the imperative of studies in ethnic history by anthropologists, archaeologists, historians, and linguists came back with vengeance in recent years, since the dangerously proliferating cultural wars nowadays usually acquire ethnic, religious, and racial forms, adding to international

and class conflicts. Ethnicities are products of adaptive specific evolutions of particular human societies, if we conceptualize them in terms formulated by Marshall Sahlins. So, there are two phases in the formation of every ethnicity: the first is characterized by a process during which specific features and patterns of culture are shaped in conjunction with a particular level of linguistic differentiation and system of kinship. When those historically come together within an interrelated social group that realizes itself in opposition to other, similarly structured social groups, and, in that process, the self-realizing human collective acquires a self-denomination, i.e. an endoethnonym, the first phase in the history of an ethnicity completes itself: a people acquires its ethnic identity. The second phase in an ethnic history is characterized by a flux in the self-realization of a people and respective transformations of ethnic identities, which may or may not attain the level of a national identity.

It is an obvious truism that old ethnicities have disappeared and the new ones formed throughout world history. World religions and globalization have been and remain powerful forces strengthening human general evolution and suppressing specific evolutions, including processes of ethnic differentiation. Ethnic integration and assimilation develop along the lines of transformation of ethnic identities. Babies are born into specific families: Cherokee or Ukrainian, Han Chinese or Bukharian Jews. These initial identities are shaped for them and imposed subconsciously or consciously by their families, the social groups with which they interact, and, in general, by their social environment, while subsequent transformations, the strengthening, weakening, or other changes of identities are adaptive processes developing on emotional and rational, individual and group levels.

So, to what extent this theoretical approach can be applied to our current, quite deficient knowledge of the ethnic history of Armenians understood as *hay-s*, and not simply as inhabitants of the territory of Armenia? Firstly, one should notice that at least since the second half of the fourth millennium BCE and until the present time, the population of the Armenian Highland and parts of the South Caucasus has consistently created and reproduced a substantial number of cultural forms that were different from the cultural forms peculiar to adjacent regions of Northern Mesopotamia, Western Iran, Anatolia, and Northern and Western Caucasus. Thus, the cultural identity of the region has been developing for at least five and a half millennia, the patrimony of which can be claimed today, to different extent in specific cases, by Armenians, Georgians, and some Iranian-speaking peoples (including the Kurds). Continuity in the process of reproduction of specific cultural forms is readily demonstrable from the Early

Bronze Age cultic hearths of the Kura-Arax civilization to the 'Late Medieval' Armenian *khachqars* (cross-stones).

The aspect of linguistic differentiation is more murky. The development of the glottalic hypothesis by Paul Hopper, Tamaz Gamkrelidze, and Vyacheslav Ivanov allowed the latter two localizing the Proto-Indo-European homeland in the Armenian Highland, between the Little Caucasus and the Eastern Taurus mountains, and further west toward Anatolia: a hypothesis that was supported by Colin Renfrew in his works arguing for a correlation between the spread of early farming and Indo-European languages migrating with their carriers from the Near East throughout Europe. However, serious criticism raised against the glottalic hypothesis as a whole prevents me at this time from using it as a point of departure in musings over Armenian ethnic history. What we know today with a more or less high degree of certainty concerning the linguistic evidence is the following. To the best of my knowledge, nobody was ever able raising major objections to the existence of the Greco-Armeno-Aryan (also abbreviated as Greco-Aryan) linguistic subfamily of Indo-European. We also know, that on the one hand the Mitannian cuneiform texts unambiguously attest to the existence of Indo-Aryan in the 15th century BCE, and on the other hand, the Mycenaean Linear B reflects the currently attested oldest form of the Greek, which means that, beyond reasonable doubt, the Armenian existed as a fully differentiated language before 1500 BCE. Now, it's been three decades since my first publications of mythological texts from the Armenian Highland and Southern Caucasus dating back to ca. 2000 BCE reconstructed at the metatextual level (see above), in which we clearly see reverberations of common Indo-European mythology. These reconstructions have no direct implications for the localization of the final Proto-Indo-European homeland since the material that I have dealt with postdates the beginning of language dispersal from the Proto-Indo-European core by at least 1500 to 2000 years. But since no substantial criticism has been levied thus far against my reconstructions, we can still conclude that among the ethnic groups that occupied the territories between the Little Caucasus and Eastern Taurus Mountains there have been speakers of Indo-European languages at least since the end of the 3rd millennium BCE. Presently several candidates for languages spoken by those groups could be designated with different degrees of certainty: Greco-Armeno-Aryan, or Indo-Iranian (i.e. Aryan), or Indo-Aryan, or Armenian, or Iranian, or, as Charles Burney suggested, even an Anatolian Indo-European. We also cannot discard at present the hypothesis about the close relationship between the Armenian and the Phrygian languages within the Greco-Aryan subfamily. In any case, we must keep in mind the fact that the

monumental cuneiform inscriptions written in Neo-Hurrian (i.e. Urartian) upon the orders of the rulers of the Urartian/Bianian Empire attest to a number of polities, whose people spoke the Armenian language before the beginning of the Urartian imperial conquests at the end of the 9th century BCE. Those polities of Armenian speakers were spread in the beginning of the first millennium BCE from Ardahan in the north to Mush in the south in what is today Eastern Turkey, i.e. approximately within the territory where Xenophon described the presence of Armenians six centuries later. But the spread of those Armenian-speaking peoples was patchy: they were most certainly interspersed with speakers of Iranian and, possibly Caucasian languages – a pattern that matches very well the situation of sociopolitical fragmentation of the Ancient Near East and Eastern Mediterranean during the Dark Ages at the conclusion of the second millennium BCE. These Armenian-speaking peoples (at least some of those that we could be sure about) did not call themselves *hay*, they called themselves *Twarac*-ians, *Iga*-ians, etc., indicating that they didn't acquire an Armenian (speaking in Nicolas Marr's terms *haykan*) ethnic identity yet. According to any conceivable model, the spread and consolidation of the Armenian ethnic identity around the endonym *hay* (regardless of the latter's origin), which would usher the beginning of the second phase of Armenian ethnic history, happened sometime during the second half of the first millennium BCE.

LHA: We just discussed a number of questions in which you connected practical research concerning specific topics with broader theoretical concepts and methodological approaches. This begs the question: how would you summarize your current epistemological position?

GEA: One of my colleagues in the USA once introduced me to an audience as 'an anthropological historian who has been doing archaeological fieldwork for a very substantial part of his life.' I'd like to think of myself rather as an interdisciplinary historian to whom the principles of holism, anti-reductionism, and historicism, combined with rigorous methodologies are of primary importance. I don't think that my allegiance to systems analysis, critical realism, and moderate constructivism contradicts those. By 'moderate constructivism' I mean that the achievements of sociology of scientific knowledge, at least in principle, allow us to avoid or liberate ourselves from many social and cultural biases in our intellectual pursuits, and psychology opens the doors to avoiding undesirable behavioural traits. Another question is: can we complete our passage in each case? The central constructivist question that I'm asking myself and didn't find yet the answer stems from the fact that in the course of our academic career we may accumulate a vast amount of approximately true

knowledge that on the one hand shapes the next steps and whole pathways of the intellectual quest that is ahead of us, and, on the other hand, if that knowledge is accepted by a community of scholars, we are shaping the content of what Thomas Kuhn called 'normal science.' De facto we are proactively constructing the content and borders of our disciplines, without having unifying systemic methodologies (at least in the social sciences and the humanities) for discovering what lies beyond the frontiers of the known. Thinking in most abstract ways, we probably would need for that the impossible 'theory of everything,' or maybe we could achieve something by mapping interdisciplinary and transdisciplinary knowledge. Actually, this interview is quite a good example of such moderate constructivism. In order to answer your questions by constructing a meaningful, consistent, and coherent dialogue I'm subjectively selecting some aspects, events, projects, and works from my intellectual/professional biography, leaving aside my participation to the excavations of the Roman *castellum* Pitius Magnus on the northeastern coast of the Black Sea, my observations from research travels to Egypt, Turkey, and Iran, my work on the miniature sculpture of Ancient Mesopotamia, research concerning human adaptive responses to climate change in the Bronze Age of Northern Mesopotamia, series of lectures on the dynamics of social identities in the Middle Ages, a heuristically productive approach toward the classification of empires and imperialism, Urartian studies, some other, quite lengthy archaeological surveys and excavations, including the currently continuing fieldwork at the Neolithic site of Masis Blur, and, finally, my dream of having a developed field of historical studies, in which political, diplomatic, social, and cultural histories would be explored and written on the basis of primarily linguistic data. This subjective selectivity would create a constructivist impact on the possible readers of this piece.

During the past four and a half decades my scholarly musings constantly returned to the problem of causality in human actions, past and present; and my obviously imperfect and still developing conclusion is that people don't act on the basis of reality that surrounds them, rather, their actions are shaped and triggered by the perceptions and interpretations of an independently existing reality (This is quite a Neo-Platonist and Kantian conclusion). That is what motivates individual action, both imaginary and actualized. Sociocultural changes emanating from those actions are caused by their conjunctions within the framework of eventual history that is shaped by the parameters of developing sociocultural systems, within which those events occur, insignificantly or significantly impacting the systems as a whole. Adopting this view, one can readily come to the conclusion that causation in human history, studied by social sciences and the humanities, is simultaneously

deterministic and random, displaying traits that are isomorphic with deterministic chaos explored quite sufficiently by now by mathematicians and physicists studying dynamical systems. If I remember correctly Edward Lorenz's insightful aphoristic conclusion, there could be no doubt that the present determines the future, but an approximate present does not approximately determine a future. This leaves room for the probabilistic expectation that the more adequately we know the past and present, the more successful we could be in predicting, actually modelling the future, although one cannot expect a linear dependency between the knowledge of the past and prediction of the future. Moreover, since the present is only a mathematical point on the time arrow, all of us, whether we are professional intellectuals or not, purposefully or not, study the past, and only inadequacies in our research practices, including tools, perceptions, and available information, can preclude us from successful identification of causes of past events and processes. What concerns the future, it seems that it will always be shaping in time at least a little bit ahead of our best inquiries, thus making any absolute deterministic forecasts virtually impossible. This obviously does not mean that we should not invest a lot of resources and efforts in the probabilistic predictive modelling of human futures.

LHA: Our conversation would be very incomplete if we don't touch upon your efforts and diverse experiences in institution building, which spanned over several periods of your professional life. It is truly remarkable that you were engaged in institution building on different scales, in three different social systems: the Soviet Union, the independent post-Soviet Republic of Armenia, and in the USA. I remember all the excitement among Armenian archaeologists and anthropologists when, in 1978-1981 you founded the Centre for Archaeological Research at Yerevan State University, where most of today's leaders of Armenian archaeology made their first professional steps. I worked at the Institute of Archaeology and Ethnography of the National Academy of Sciences of Armenia when you were appointed the Vice Director in charge of the research work conducted by more than eighty scholars of this institute. Then, in 1991 and 1992 you served as Minister of State/Deputy Prime Minister of the Republic of Armenia, a position that no longer exists, but in those challenging times you governed many areas of activities in our republic, including education and science. I had the fortune or misfortune, I'm not sure which, of working with you on creating the coat of arms for the Republic of Armenia and then you had, among other successful, and not so projects, including the establishment of the National Foundation for Science and Innovation. Among those was one that I can now see as a great idea: the creation of the National Institute for Strategic Research. But

you had made the grave mistake of wanting me to get involved in this project. People still remember with deep appreciation your efforts to fight nepotism and introduce a comprehensive system of meritocracy by approving new ordinances and procedures for hiring governmental employees. And after you had to move to the USA in 1993 you made substantial contributions to the organizational and administrative successes of the Cotsen Institute of Archaeology at UCLA, which I had the pleasure to visit on the occasion of an international conference that you organized there, and, finally, founded the Research Program in Armenian Archaeology at the University of California, Los Angeles – the only one of that kind in the United States. Most of the institutions that you created or developed during the last four decades still thrive today, and I'm sure that I have missed mentioning some of those in this long question. But tell us, what do you see as your most important achievements, the most gratifying times, and lessons that you have learned from your institution building practice?

GEA: It would be a truism known to very many that institutionalization is a result of development of social complexity, a necessity of social organization, a response to societal demand for effective leadership and governance, for professionalization, a result of division of labour, and of interplays between multiple other factors. Learning from books on management about institution building is one thing, from practice – another. I learned that for an institution to be successful, the conditions for its establishment and consequent success must meet at least the following criteria:

- (1) being established at the right place at the right time (i.e. meet the existing or foreseeable social demand),
- (2) being lead by the right realistic vision of committed leadership deeply understanding its mission and functions,
- (3) have available qualified, interested, and enthusiastic human resources,
- (4) have available sufficient financial resources.

What is right or wrong could be determined only by the success or failure of the institution. In any human society competition for power and, consequently, resources are the most significant threat to any institution, which requires from the management of the institution to innovate constantly and successfully. Institutions need to constantly justify their relevance through produced results, which is least true for archaic traditional societies, and most true for meritocratic societies. These are general principles, but there are also other approaches, applicable to specific areas of institutional development. There is a number of globally unsolved issues in the institutional organization of science and of

research in general that manifest themselves in different countries to different degrees. The most frustrating in the Soviet Union, as well as later in the Republic of Armenia, was, and still remains to a lesser degree the monopolization of science by major institutions and some governmental entities. In the early 1970s there was only one institution, the Institute of Archaeology and Ethnography of the National Academy of Sciences with the exclusive rights to conduct archaeological researches in Armenia. It took me one and a half decade to break that monopoly, and I was very lucky, because I enjoyed a top-down support, including, but not limited to the two consecutive directors of that Institute, Babken Arakelian, and Gevork Tiratsian, who understood the nation-wide perspective for the development of the social sciences. But department chairs, program directors, and several professors inside that institute, who were afraid of losing their privileged positions to the competition, formed the resisting pack. But it happened that while developing the Centre for Archaeological Research at Yerevan State University, I was simultaneously appointed to the newly formed Department of Antiquities at the Office of the Prime Minister, and was able to support the development of archaeological researches conducted by several museums. And one of the projects that I completed while serving as Minister of State was the establishment of the Centre for Studies and Documentation of the Cultural Heritage at the Ministry of Culture, thereby shaping a polycentric network of institutions for archaeological researches nationwide. This network successfully continues functioning to this day. Unfortunately, I wasn't able to achieve a de-monopolization of all science in the republic. After moving to the US, I saw the ongoing struggle for control of financial resources for academic research between institutions and individual scholars. Unfortunately, there is so much subjectivity, nepotism, gossiping, and sometimes even hidden bigotry involved, especially in the distribution of research grants (I'm saying this both as a grantee and as a member of panels and committees distributing grants). I think that the whole system of research financing is flawed in many countries. You shouldn't fund research the way, let say, manufacturing or building construction are funded, where you can forecast more or less accurately the success of products based on designs and business plans. In funding of research the proposal that is written the best may yield results inferior to those proposals, which, at the stage of review, were deemed of lower quality. Research can be evaluated only on the basis of its final results. So, why not to fund simultaneously two or several projects (depending on available resources) exploring the same topic and to conclude only after their completion, which of the two produced the best, most innovative, and most efficient results? That would certainly improve

equitability and enhance the prestige of scholars with superior achievements.

Regarding the most gratifying episodes in my institution building activity – I certainly had a few. I loved organizing museums and creating exhibitions, protecting cultural heritage sites from destruction, supporting and advising projects of conservation and restoration of architectural monuments, publishing important books written by colleagues. Today you can tour the exhibition of the Erebuni Museum of the Urartian civilization, which was put together under my supervision in 1979. Now it looks outdated and requires a complete revamping, especially since other aspects of the museum have expanded and some other exhibits added. Or you can visit a block of restored 19th century folk houses in the resort town of Dilijan, where I spent many hours bringing that project to fruition.

Another project to the implementation of which I contributed organizational efforts was the creation of the Sergey Parajanov Museum in Yerevan. Parajanov was a great filmmaker and artist, internationally recognized by such figures as Tarkovsky and Fellini. He was oppressed during the Soviet times for his break up with Soviet realism. [Levon], you knew him: he was a talent with a very difficult destiny, not adequately appreciated during his lifetime. I remember vividly, as if it was yesterday, the many intellectuals, cultural leaders, and also supporters of the Armenian movie industry, joining their efforts together and making that museum a reality. The museum was actually envisioned and the exhibition designed in between Parajanov's two imprisonments for political reasons. Per Louis Aragon's request, he was released from prison by Leonid Brezhnev in 1977, then he was arrested second time in 1982, so the museum acquired its official status and opened only in 1991 after his death that coincided with the collapse of the Soviet Union.

Among my more recent rewarding experiences combining administrative and intellectual efforts was the complete redesign of *Backdirt*, the flagship publication of UCLA Cotsen Institute of Archaeology, which was transformed from a small newsletter into a new kind of archaeological publication combining features of a popular magazine with a peer-reviewed academic journal.

EUK: From 1993 to 2015 you taught and conducted your research at major US universities and colleges: the University of Wisconsin, University of Chicago, UCLA, UC Irvine, and others. How do you look back on the diverse experiences from that period of your academic life?

GEA: US universities still are one of the best places in the world to access scholarly information and exchange ideas with one of the largest communities of amazing intellectuals. At the University of Chicago, where I taught courses on comparative mythology, the archaeology of the Caucasus, and Armenian history, I had the privilege of working with Marshall Sahlins during his last tour as Chair of the Anthropology Department, learning about all intricacies of working in Iran from the late William Sumner, having delightful discussions and getting profound comments enriching my research from Hans Güterbock, Walter Kaegi, Bruce Lincoln, and McGuire Gibson, later developing a productive collaboration with Adam T. Smith and Gil Stein. At UC Irvine I found a great friend, Touraj Daryaee, and how can I forget mentioning my long-term delightful collaboration with David Stronach of UC Berkeley on Urartian and Achaemenid topics. I have lots of memories from a ten year-long affiliation with UCLA where I worked at the Department of History, Cotsen Institute of Archaeology, and the Department of Near Eastern Languages and Cultures, teaching courses ranging from Ancient Near Eastern to Soviet history. At the History Department I was warmly received by Richard Hovannisian and Ron Mellor, who was the first to hire me at UCLA and I'll be always appreciative of Hans Barnard for his co-authorship, and of Peter Cowe from the Department of Near Eastern Languages and Cultures. Yet, among the three aspects of my research developed at UCLA, which were mostly productive and profoundly enriching for my academic experience, I must first and foremost mention my collaboration and friendship with Giorgio Buccellati and Marilyn Kelly-Buccellati, who graciously invited me to become a member of their Tell Mozan Project in Syria. Here I should not forget Ernestine Elster. It is truly a very special thing to note that I first met Ernestine when she and her husband Sandy, along with the Buccellatis, came to Georgia and Armenia in 1974 when I was completing my graduate studies. The second unit at UCLA that provided for me the intellectual space to further my interdisciplinary explorations in comparative mythology was the interdepartmental Program in Indo-European Studies, where I was brought in by Brent Vine and later had a chance to develop a close intellectual relationship with Calvert Watkins. The third gratifying area of my work at UCLA was related to the study of civilizations of Central and Inner Asia. UCLA didn't have archaeologists and cultural historians specializing in the pre-modern periods of those Eurasian regions, so my experience in the fieldwork and conferences directed and organized by Vadim Masson, the Director of the Leningrad (Saint Petersburg) Institute of Archaeology in Turkmenistan, Uzbekistan, and Kazakhstan in the 1970s and 1980s found the right time and place to be applied. So, I taught a course for the UCLA Interdepartmental Ph.D. Program in Archaeology on the interactions between the

nomads of Eurasia and sedentary civilizations, which was followed by an interdisciplinary course on the 'Silk Roads' taught jointly by Lothar von Falkenhausen, Vyacheslav Ivanov, and myself. This has led me to dig deeper and deeper into the interdisciplinary history of the so-called 'Silk Roads' and conclude that there is a lot of superficiality in the treatment of this very important topic, even by many renowned specialists who created, beginning with Ferdinand von Richthofen, and to some extent even earlier – by Edward Gibbon, an image of daring traders crossing the deserts on camel caravans loaded with silk and other commodities and artisan's products, carrying with them at the same time knowledge, innovations, and transferring religions across the vast expanses of Asia. I soon realized that such an image doesn't explain much, and that it is time that we focus on the driving forces and main ingredients of that Transeurasian network. And since a lot had been said about one of the main components of that network: traders, goods, knowledge, and religions, i.e. about those who were transporting and what was transported, I turned my attention to those who were securing those movements through relationships of power and dominion – the great Eurasian empires created and governed by elites of nomadic origin by means of nomadic warfare. The most emblematic and 'pure' example of this model of empires was the Great Kushan Empire (1st-3rd centuries CE), still insufficiently studied and very little known to the general public. Then, the third main component of the 'Silk Road' network were the cities with their markets where the exchange of goods and information took place and, therefore I started studying the cities of the 'Silk Road,' deciding to focus on particular cases, beginning from the western end of that vast network, since my knowledge of that end has been more adequate. I continued this line of thought into the city of Ani in 'medieval' Armenia, teaching a graduate seminar at UCLA concerning this topic, before deciding in the second half of 2015 to move back to Armenia, which coincidentally will give me more ability to conduct this research.

EUK: Now you are back to Yerevan, having accepted a position of Professor of History and Archaeology at the American University of Armenia, plunging into new opportunities, responsibilities, and relationships. Did you postpone the projects that you started in the USA, or are you following up on them? And how about the Ani project, are you pursuing it or delaying it?

GEA: Not at all. My interest in Ani originated long before I began the studies of the 'Silk Road.' Actually, my pathway to Ani was really long and I have to look back and return again in my memories to the times of my childhood, and that would be most likely the autumn of 1959, when my mother took me on an excursion to the National Museum of History of Armenia. We were

greeted at the entrance of the museum, at that time it was in the original part of the building on Abovian, by Karo Ghafadarian, the director of the museum for several decades, a good friend of my mother and the leading medieval archaeologist and epigraphist in Armenia. He gave us the tour of the museum that lasted for few hours, starting from the hall of the Stone and Bronze ages, where my attention was attracted by richly decorated wooden pieces of a three thousand years-old funerary cart found by Yervand Lalayan in 1906 in a tomb of a ruler, which he excavated on the shore of Lake Sevan. That was followed by the Urartian Hall that in those days had on display almost exclusively the artefacts found at Karmir-Blur, then I remember the model of now reconstructed Roman-style temple at Garni, but all those did not turn out to be my ultimate impression for that day. It was the time when my interest in Medieval European warfare still was on the rise and I was collecting images of castles and city fortifications. And when Ghafadarian walked me through the doors of the Medieval Hall, I suddenly saw in front of me a large model of a city with ramparts, moat, towers, and gates, which I immediately associated with the best preserved European medieval cities and castles. I ran toward the model and asked with excitement: 'What is this?' Ghafadarian replied that it was the model of the medieval Armenian city of Ani, the capital of Armenia. I immediately asked, 'Can we go there?' He said, 'No, because it is not in Armenia, now it is in Turkey since 1921.' I found it very strange how the capital of Armenia was not in Armenia. Then I learned about the great importance of Ani during the formative years of Armenian archaeology and art history. It was explored and partially excavated in 1892-1917 on a basis of a multidisciplinary agenda by a diverse group of scholars led by Nicolas Marr of the Saint Petersburg University and the Russian Imperial Academy of Sciences, who at that time was leader of Armenian and Caucasian studies. The people he brought to work at Ani were archaeologists and historians of architecture, art historians and philologists who read inscriptions, historians of the Middle Ages, and he himself was a scholar versed in different fields, who was assisted by his student and, later, collaborator, Hovsep (Iosif) Orbeli. The latter also was a broadly trained orientalist (in those days, Oriental Studies first and foremost meant the study of the Middle East), and all together they had developed a truly multidisciplinary perspective on Armenian and Caucasian history and civilization, on the interactions between the Christian and Islamic East. My interest in and understanding of Ani has been growing for the last three decades along with teaching a variety of topics in Middle Eastern and Armenian history and Caucasian archaeology, but it acquired totally new dimensions when it crossed over with my studies of the 'Silk Road,' which I just mentioned above. What better place to start a study of urbanism of the

‘Silk Road’ network than the city of Ani, with which I’m sufficiently familiar, I asked myself.

A brief sketch of Ani and its place in Armenian, Caucasian, Middle Eastern, and Eurasian history can be encapsulated in its – surprise, surprise – periodization, if we accept periodization as the systemic foundation for studies of continuity and change in human societies. Straddling the current border between Turkey and Armenia on Akhurian River, the geographic area of Ani was occupied no later than the Bronze Age, although no regular field research concerning that period was carried out on the site. It is almost certain, that later a settlement existed on the location of Ani from the times of the Roman domination of Armenia through the 15th or even 16th centuries CE, i.e. the remains of Ani cover and reflect most of the macroperiods III and IV of my periodization of Armenian history (borderland centrality and diasporization), more of the first than of the second. But, since we attest the presence of a continuously integrated sociocultural system of a settlement in the course of these macroperiods, we can and should construct its own periodization(s), which presently looks as follows:

Period 0 – all the human activity that we know had occurred in that place before the 1st-2nd centuries CE.

Period I: 1st-2nd centuries CE-961 CE – Ani is a non-urban settlement from ‘Late Antiquity’ to the early part of the ‘High Middle Ages.’

Period II: 961-1064 CE – Ani is the capital city of the Kingdom of Great Armenia and Armeno-Georgian Kingdom ruled by the Bagratuni Dynasty, and, afterwards – the military-administrative and economic centre of the Iberia Province of the Byzantine Empire; during this period Ani represents the pinnacle of Armenian civilization and the utmost expression of materialized Armenian identity.

Period III: 1064-1330/50 CE – despite all the vicissitudes of its history, the prosperous city of Ani is a major hub of international commerce and craftsmanship on the western end of the ‘Silk Road’ network under the superficial domination of Eurasian empires of nomadic origin, which created propitious conditions for pre-modern globalization; an epitome of more or less successful multiculturalism, it is inhabited by interacting Armenian and Georgian Christian, Kurdish and other Muslim communities under the local governance of Armenian or Armenianized elites; the abandonment of Ani by Armenians begins.

Period IV: 1330/50-16th century CE – Ani is a predominantly Muslim town dominated by a Turkic-speaking community; it loses its urban character

but still functions as a military base in the conflicts preceding the partition of the Middle East between the ‘gunpowder empires’ of the Ottomans and Safavids.

Many individual components of the site have been described and analyzed in the course of more than a century, however this hidden gem of Near Eastern history and archaeology still awaits to find its adequate place in the studies of Eurasian and Mediterranean civilizations from the broadest perspective. My personal research interest in Ani is driven by the realization of a possibility to bring together, in a single case study of that site, all the variety of theoretical and, especially, interdisciplinary approaches that I have been toiling on in the course of my academic career, to the extent that they are applicable to questions of historical causality, interrelations between micro- and macrohistory, sociocultural change, dynamics of political power, social identities, and societal conflicts, multiculturalism as a particular form of human diversity, the relationship between imperialism and globalization, and others.

But there is also another, politically relevant current aspect that strengthens and stresses the importance of studies and preservation of the cultural heritage of Ani: it’s been already more than a hundred years that the issue of the Armenian Genocide during the last years of existence of the Ottoman Empire, which has been recognized by the international academic community, including a number of Turkish historians, as well as nations, created acrimonious relationship between Turkey and Armenia, Turkish people and Armenian people. Regardless who to blame for the genocide that happened a century ago (whether the triumvirate of Talaat, Enver, and Jemal that governed the Ottoman Empire during World War I, or broader political forces such as the Young Turk political party called the Committee of Union and Progress dissolved in 1918), today this animosity is detrimental to both parties. So, why not to start the process of reconciliation from the recognition of the Armenian patrimony with regard to the sites left by Armenians across Turkey, or even affirm a joint patrimony in many cases? And where is a better place and way to start that process than developing a multinational project for the study and preservation of Ani’s cultural treasures? This would be a magnificent example to follow in today’s tumultuous Middle East.

EUK: We began with your five-year-old self in your grandfather’s workshop, looking at an artefact from Karmir Blur, other artefacts from which site later became part of your dissertation. (If I recall correctly, you were one of the youngest persons to receive a Ph.D. from the Institute in Leningrad at that time.) Similarly, your most recent work and forthcoming book on Ani is also a return to your childhood, even to your earliest understanding of your identity as an Armenian. There

are multiple full circles in your academic career. So let us end back at the beginning. What happened to the grey basalt bowl, the Urartian bowl from Karmir Blur that Piotrovsky gave your grandfather?

GEA: Oh! By the end of high school I had amassed a small, but really nice collection of archaeological artefacts found accidentally, not during professional archaeological fieldwork or excavations, in different places of Armenia or given to me as gifts from student study collections (in those years there was no illicit market for antiquities that exists today). That bowl was one of the first items in that collection. When I entered as a freshman in the Archaeology Undergraduate Program of the Department of History at Yerevan

State University, I deemed that continuing collecting would be unethical for a professional archaeologist or historian. Therefore, I donated my collection to the National Museum of History of Armenia, where that bowl rejoined its counterparts from Karmir Blur. You can see them there, my childhood collection joining with artefacts of my most recent work in the field, building a better understanding of the Armenian past. Quoting José Ortega y Gasset's unforgettable maxim from his *Meditaciones del Quijote*: 'Yo soy yo y mi circunstancia' ('I am I and my circumstances'). I think that it fully applies to me and my story.

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Menhirs of Harzhis

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Abstract: Harzhis village is situated in Syunik province, Republic of Armenia at an altitude of ca. 1730 m above the sea level. A great number of archaeological sites in and around the village suggest that Harzhis was an essential administrative and spiritual center during the Bronze and Iron Ages. The main purpose of this article is to present only one aspect of archaeological heritage of Harzhis - the menhirs. Based on data towards spatial distribution of menhirs, it is possible to assume that they could be used as both mortuary and boundary stones. The problem of their dating is a more complicated issue. The reason is from the one hand the lack of excavations, from the other hand the menhirs could have existed during a long span of time being reused in various periods. In any case, it is clear that the menhirs of Harzhis must be observed in the context of megalithic complex of Armenia and South Caucasia, dating back mainly to the borders of the II and I millennia BC.

Keywords: Harzhis, Syunik, menhirs, megalithic complex, problems of spatial and temporal distribution, Bronze and Iron Ages

Introduction

Harzhis village is located in Syunik Marz (province) of Republic of Armenia,¹ on the left bank of Vorotan River, 79km to the north of the Kapan administrative center, at an altitude of ca. 1730m above the sea level (Figure 1).² The present-day village is on a broad plateau, where it was relocated after the earthquake in 1930.

Geologically, the territory lies within the Yerablur plateau boundaries, in the northwestern side of the Sisian steep plateau, which is bordered by Vorotan River gorge from the south and southeast. It spreads from the Aghitu village surrounding area, where the river inflows passing through the extent and terracing Sisian depression. The gorge depth reaches 650m near Harzhis.³ Here, liparite, obsidian and dacite domes and volcanoes appear in the form of relict erosion massifs in the sections. This complex covers the Jura, Cretaceous and Eocene outcroppings observed along the Vorotan gorge.⁴

Historical and archaeological context

Harzhis belonged to the Tsghuk region of Syunik province in the medieval period.⁵ The name of the settlement is first mentioned during the reign of Smbat I Bagratuni, who assigned the village to the Tatev monastery.⁶ This village is sometimes identified with the toponym Harzheq, mentioned by Stepanos

Orbelyan.⁷ It was passed from hand to hand for several times later on, but every time it was returned to Tatev monastery, paying 10 units of tax.⁸

The medieval sites are represented by 9th-10th cc. cross-stones that are recorded in the southern side of the village,⁹ in the cemeteries of Nerkin Krder¹⁰ and the Hin Harzhis (Nerkin Shen) settlements.¹¹ The great significance of the village in the time of Orbelyans is evidenced by numerous sites and monuments: cross-stones,¹² inscriptions,¹³ 'Alan king' church,¹⁴ etc. In the historical sources settlements neighboring Harzhis are also mentioned: among them are Arit village to the northeast, Artsiv and Berdkanerechi to the northwest.¹⁵

The ancient sites of the area under study are also diverse. While the medieval settlements are mainly concentrated on the terraces, descending towards the gorge, the ancient sites are located on the plateau. A set of fortresses, settlements and cemeteries are situated in the village and surrounding areas. In particular, in the beginning of the road turning off the main highway Yerevan-Goris to Harzhis, 6 km to the north of the

¹ The project is conducted in the frames of the theme 'Megalithic culture of Ancient Syunik', confirmed by the State Scientific Committee of Republic of Armenia (Project Number 15T-6A349).

² Settlement Dictionary 2008: 120.

³ Balyan 1969: 276-277; Hakobyan et al. 1991: 388.

⁴ Balyan 1969: 278.

⁵ Alishan 1893: 208; Stepanos Orbelyan 1986: 394.

⁶ Stepanos Orbelyan 1986: 275.

⁷ Barkhudaryan 1960: 81; Lalayan 1897: 168.

⁸ Stepanos Orbelyan 1986: 232-233, 394.

⁹ State List of Monuments (afterwards SLM), Yerevan 2002, 8 (Syunik marz) 56 (Harzhis village) 5 (cemetery) 1.

¹⁰ SLM 8 (Syunik marz) 56 (Harzhis village) 7 (Nerkin Krder) 1 (cemetery) 1.

¹¹ SLM 8 (Syunik marz) 56 (Harzhis village) 8 (Hin Harzhis) 1 (cemetery) 1.

¹² SLM 8 (Syunik marz) 56 (Harzhis) 7 (Nerkin Krder) 2 (vestibule) 1-4, 8 (Syunik marz) 56 (Harzhis) 7 (Nerkin Krder) 3.

¹³ Barkhudaryan 1960: 80.

¹⁴ The church gained its name from the dated inscription of the gravestone (1326). See, Lalayan 1897: 168; SLM 8 (Syunik marz) 56 (Harzhis village) 7 (Nerkin Krder) 1 (Alan king church) 2 (vestibule).

¹⁵ Stepanos Orbelyan 1986: 465-466; Alishan 1893: 246-247; Inchichyan 1822: 289.

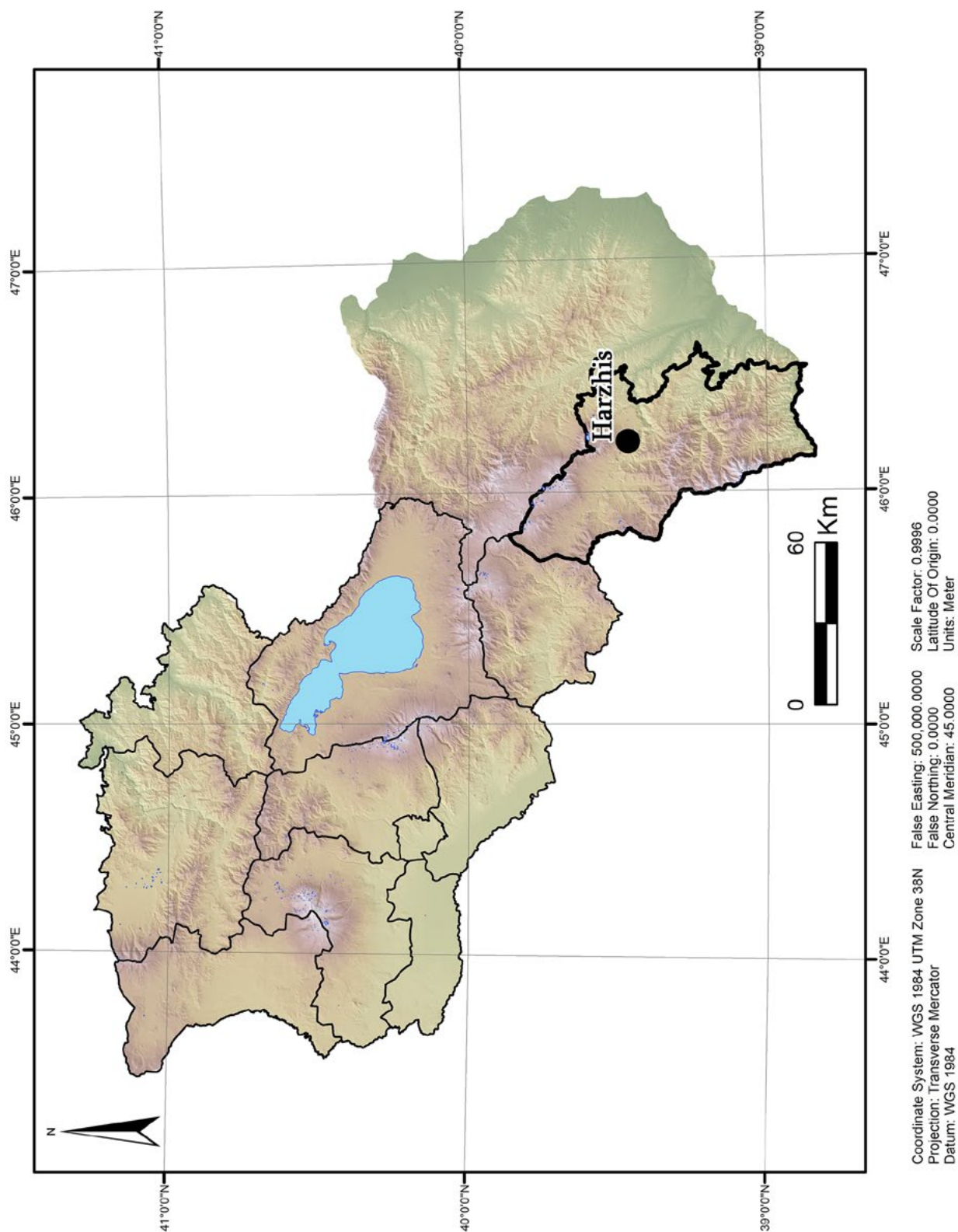


Figure 1. Location of Harzhis, Syunik province, Republic of Armenia.

village, Karablur fortress is situated on the top of the hill.¹⁶

Several settlements are located in the immediate vicinity of the fortified settlement: 3.7km to the north-west of the village,¹⁷ 4.3km to the north-west of the village on the left bank of the ravine,¹⁸ on the southern side of the village (on the edge of Vorotan gorge), on the promontory between Vorotan eastern tributary and the river.¹⁹ There is a set of cemeteries within this territory that are located in the village area,²⁰ in the northern side of the settlement to the south of the village,²¹ on the left side of the road, leading from the village to the main road (1.6 km to the north-west from the village).²² Judging by these data, the territory of modern Harzhis was always a center of large settlement agglomeration. The central role of the village during millennia has been conditioned by both natural resources (galena – lead mineral was mined at a 2km distance from the village during medieval period)²³ and by the fact that the region was located on the crossroads.

According to the historical sources, Harzhis was the only settlement on the road Ltsen-Tatev. It is evidenced also by the Kurdanshah bridge built over Vorotan.²⁴ On the other hand, Partav road passed through Harzhis. It went through Nakhijevan river basin, Bichanak mountain pass, descended towards Angeghakot, turning to Sisian and then passing through Aghitu and Urut. It is also evidenced by the caravanserais in Harzhis and Bichanak pass.²⁵ The road from Darapas led to the Nakhijevan valley (there is a bridge in Darapas with a damaged inscription²⁶). Finally, this road bypassed Yerablur from the southern side, and entered Goris.²⁷ The significance of Harzhis in its early period is evidenced by ceramic collection discovered from the cemetery that finds its parallels in Artsakh, Iran as well as Erebuni, Teishebaini, Ishakan and other sites. Here the Scythian type arrowheads were also found.²⁸

Menhirs and their traits

The ancient sites of Harzhis, as mentioned above, are represented by fortress-settlements and cemeteries.

However, Harzhis is unique in its monuments, in particular, the anthropomorphic stone sculptures and menhirs. Just the menhirs will be discussed below, which are densely located in the studied area. Menhirs are single erected stones to be created due to the minimal treatment of the natural rock.

Syunik is quite rich in menhirs. Similar to the other cultures, in Syunik, menhirs appear separately, on burials and platforms (for example, in Selim), standing in even rows (alignment) (for example, in Zoratskarer) and enclosed rows (for example, in Kuri Kharaba). Though the factual material is insufficient, it is possible to determine several types among the Syunik menhirs based on the treatment of the upper part and its general treatment. Thus, two large groups could be observed: the first group includes menhirs with an angular or semi-angular top, meanwhile the menhirs of the second group have a flat or oblique top.

Menhirs are recorded in several points of Harzhis: on the road to the caravanserai and in cemetery, one menhir is incrustated in the southern wall of newly-built Brevakhach chapel, in the southern side of the village, and another one (later used as a tombstone) is located in the late cemetery of the Hin Harzhis (Nerkin Shen) settlement.²⁹ Some menhirs have holes (10cm) of secondary use mainly observed in the upper or sometimes in the middle part of the menhir, and can be seen in the context of the abovementioned types of Syunik menhirs (Table 1, Figures 2-5).

Menhirs on routes. Menhirs N1-5, 12 belong to this group. Also N18 and 19 must be included here, which were replaced from the territory of Harzhis in 1980's and set on the road to the Karahunj village (Syunik province, Goris region) and on the border between the Karahunj and Harzhis villages.³⁰ The menhirs are placed on the modern Goris-Harzhis road, stretching towards the caravanserai. Based on this fact, menhirs N 3-5 were interpreted as medieval milestones,³¹ while some specifics of treatment (triangular, flat or oblique tops, and rounded sides, sometimes having also a transversal part) are characteristic of II-I mill. BC, as small architectural forms in Armenia.³² In the same context

¹⁶ SLM 8 (Syunik marz) 56 (Harzhis village) 1.

¹⁷ SLM 8 (Syunik marz) 56 (Harzhis village) 2.

¹⁸ SLM 8 (Syunik marz) 56 (Harzhis village) 3.

¹⁹ SLM 8 (Syunik marz) 56 (Harzhis village) 4.

²⁰ SLM 8 (Syunik marz) 56 (Harzhis village) 9.

²¹ SLM 8 (Syunik marz) 56 (Harzhis village) 4 (settlement) 1; cf. Xnkikyan 2002: 78.

²² SLM 8 (Syunik marz) 56 (Harzhis village) 10.

²³ Grigoryan 1990: 175.

²⁴ Alishan 1893: 221; Grigoryan 1990: 274; SLM 8 (Syunik marz) 56 (Harzhis village) 11.

²⁵ Barkhudaryan 1960: 81; Harutyunyan 1992: 342; Hasratyan 1985: 70; Khalkhachyan 1971: 185, 189, 196; SLM 8 (Syunik marz) 56 (Harzhis village) 16.

²⁶ Lalayan 1898: 165. Cf. Ghukas Sebastatsi 1988: 19.

²⁷ Barkhudaryan 1960: 81.

²⁸ Xnkikyan 2002: 80-83.

²⁹ SLM (8 (Syunik marz) 56 (Harzhis village) 7 (Nerkin Krder settlement 1 (cemetery) 1. One of the cross-stones discovered in the church cemetery on the western side of Nerkin Krder settlement was identified by creators of SLM as a dragon stone (vishap) (N 20, not included in Table 1), but specifics of the site do not allow considering this viewpoint possible.

³⁰ The stone was replaced in 1980's by the resident of Karahunj, Artavazd Manucharyan, who used it as a boundary stone.

³¹ SLM 8 (Syunik marz) 56 (Harzhis village) 14, 15, 16 (caravanserai) 1. Cf. Barkhudaryan 1960: 81. S. Barkhudaryan mentioned that these kinds of stones are placed also near the caravanserai in the Bichanak pass. It is not excluded that the menhirs were reused also in medieval period for another purposes.

³² The menhir from Kotacank that has been transformed into a cross-stone, has a triangular top (recorded in 2015 by A. Bobokhyan, A.

there are also monuments similar to the menhirs N 1 (N 2, 18, 19).³³ The menhirs are mainly placed upright except N 12, 18 19, the side parts of which have a 'protuberance'.³⁴ The menhirs (N 1, 4, 5) are usually placed on small mounds encircled with cromlechs, the functional purpose of which (platform, burial) could be clarified only after excavations. Concerning menhir N 1, it is mentioned that it stood in the center of the building. Taking into account the fact that the traces of settlement are recorded within this territory, the issue of contemporaneity of the structure with menhir becomes disputable.³⁵

Menhirs in cemeteries. Six menhirs (N 6-11) from neighboring Darapas are included in this group. These are exceptionally placed in the central part of kurgans, encircled by cromlechs. Kurgans have stone sand filling, with large stones in the upper part. The average diameter of the burials is 10-15m. On the top of every tomb one megalithic structure is placed, except the menhirs N 10-11. Apart from the menhirs N 9 and 11, the megaliths were found in horizontal position. In the burial complexes of Armenia menhirs were recorded mainly in the horizontal position on the top of the burial (Shamiram, Akhlatyan, Pokr Masis etc.³⁶), in the burial filling (Khanlar)³⁷ in some cases reaching the surface (Khanlar, Ghushchi Demirchi, Ali Bashli).³⁸ In this group are included both upright symmetrical stelae and comparatively wide menhirs sometimes with rounded transversal part (N 9 and 11). The monuments of this type are known from Akhlatyan, Kare Dzi (N 2, 3), Gyavur Damer, and probably, from Khanlar.³⁹

As in case of the previous group, the stelae are also placed within the territory of the settlement, but judging by the building technique the settlement refers to a later period than the cemetery. In case of some stelae the flat (in section rhombic - N 6) and triangular (N 8) bottom can be seen. Along with the menhirs a rounded stone sculpture was recorded here, the function of which is not clear. This sculpture does not have any direct parallels in the Armenian archaeological materials, but it could

be identified with the altar from Bazarkhana, not far from Khoznavar village (Syunik province). It was made of a semi-circular stone slab, and another semi-circle is filled with small stones. It is noteworthy that this altar was discovered in the context of anthropomorphic sculpture and menhir. The whole complex is encircled with a cromlech.⁴⁰

Menhirs of chance finds. There were stelae found in Harzhis along with abovementioned menhirs, initial location of which is unknown. They are recorded in three locations. Several menhirs (N 13-15) were relocated to the village center, and placed in the yard of Cultural Center, one monument is located in Nerkin Shen cemetery (N 16) and has been used as a gravestone. Another one is incrustated into the southern wall of Barevakhach new-built chapel on the southern side of the village (N 17).

Almost all abovementioned menhirs (except N 14) were reused: N 16 served as a gravestone, N 17 was transformed into cross stone in X-XI cc., and N 13 was used as a stele. N 16 has some similarities to the menhir N 4 (except for the hole/opening), but the stelae N 13, 15 and 17 certainly differ from other stelae of Harzhis. They are rectangular in section (N 14) and often smoothed (N 13, 15, 17). Menhirs that were transformed into cross stones (one from Dadivank, and another one called 'Kapuit khach') and relocated to the town of Abovyan have a nearly square body in section and smoothed surface.⁴¹ Menhirs from Avanik and Khnatsakh (Tsits kar) that were used in the Christian period also have smoothed surfaces.⁴² A bas-relief depiction of concentric circles on the transversal part of the stele N 15 is particularly noteworthy.

Conclusions

A great amount of settlement-fortresses, cemeteries and cultic monuments within the territory of Harzhis village suggest that Harzhis and the surrounding regions were a large administrative and spiritual center during the 2nd-1st millennia BC. Its importance was conditioned by the significant geographical location. The main objective of this report was to study only one manifestation of diverse material culture of Harzhis, i.e. the menhirs. Though a great amount of menhirs is located in Harzhis region, the lack of archaeological excavations does not allow a thorough comprehending of this phenomenon. Based on localization of these examples, it is possible to assume connection of the stelae with the cult of ancestors, as the major part of

Gnuni, G. Khachatryan). The menhir 'Kapuit khach' ('Blue cross') in the town Abovyan has an oblique top and had been also transformed into a cross stone (SLM 6 (Kotayk marz) 2 (town Abovyan) 5). There are also oblique and rounded tops recorded in Shamiram (Samuelyan 1931: Figure 57, 58). Some anthropomorphic sculptures also have oblique tops (Aygeshat, Shamiram, in: Ejmiadzin Historical-Ethnographical Museum (inv. no. 4413, 4497, 5661/40):

³³ SLM 8 (Syunik marz) 56 (Harzhis village) 13, to be described as a menhir.

³⁴ Similar kinds of protuberance are also noticed in Navur, cf. Hmayakyan et al. 2010: Figure 10.

³⁵ Cf. SLM 8 (Syunik marz) 56 (Harzhis village) 13 (menhir) and SLM 8 (Syunik marz) 56 (Harzhis village) 3 (settlement).

³⁶ E.g. Barkhudaryan 1935, Plate 9; Samuelyan 1931, Figures 57-58.

³⁷ Otčjoty Arxeologičeskoj Komissii (Reports of the Archaeological Committee) 1902: 63; 1906: 80; cf. Ivanovskiy 1911: 34.

³⁸ Otčjoty Arxeologičeskoj Komissii 1902: 59; Ressler 1905: 17.

³⁹ Avetisyan et al. 2015: 20, Plate 26, 27, 50; Barkhudaryan 1935, Plate 9; Otčjoty Arxeologičeskoj Komissii 1902: 59.

⁴⁰ Gharibyan et al. 2011: 130.

⁴¹ Avetisyan et al. 2015: 65. For parallels in North Caucasus (Arkhyz in Karachaevo-Cherkessia) cf. Materialy po arxeologii Kavkaza (Materials on Archaeology of the Caucasus), Moscow, 1898: 138-139, Table. XXI/2-5; Alekseeva 1992: 42.

⁴² Avetisyan et al. 2015: 20, Plate 35.

Disposition on routes									
1	N 39.47020°, E 046.23504°, H 1919	170x42x40	vert.	flat	rounded	rounded	rounded	triangular	upper part
2	N 39.46888°, E 046.21865°, H 1866	180x55x36	vert.	flat	gibbose	rounded	flat	oblique	upper part
3	N 39.46902°, E 046.21611°, H 1855	175x40x36	vert.	flat	flat	flat	flat	oblique	upper part
4	N 39.470140°, E 046.20644°, H 1861	185x65x25	vert.	flat	rounded	rounded	rounded	oblique	upper part
5	N 39.47045°, E 046.20462°, H 1864	220x64x28	vert.	flat	rounded	rounded	flat	triangular	upper part
12	N 39.46889°, E 046.21431°, H 1862	330x60x25	horiz.	flat	rounded	rounded	flat	oblique	upper part
18	N 39.48374°, E 046.35863°, H 1180	220x60x35	vert.	flat	rounded	rounded	flat	oblique	upper part
19	N 39.47630°, E 046.25085°, H 1958	147x50x28	vert.	gibbose	flat	rounded	flat	oblique	upper part
Disposition in cemeteries									
6	N 39.47054°, E 046.18244°, H 1902	236x90x35	horiz.	flat	?	flat	flat	triangular	-
7	N 39.47072°, E 046.18169°, H 1901	250x50x20	horiz.	flat	?	flat	protruding	flat	upper part
8	N 39.46892°, E 046.18116°, H 1894	220x50x30	horiz.	rounded	?	flat	rounded	flat	-
9	N 39.46835°, E 046.18377°, H 1872	88x67x33	vert.	flat	rounded	flat	rounded	protruding	-
10	N 39.46835°, E 046.18377°, H 1872	280x88x40	horiz.	flat	?	flat	flat	triangular	middle part
11	N 39.46835°, E 046.18377°, H 1872	110x75x24	vert.	flat	protruding	gibbose	gibbose	flat	-
Chance finds									
13	N 39.43362°, E 046.22368°, H 1691	263x47x43	horiz.	square (lower part), rounded (body)	square (lower part), rounded (body)	square (lower part), rounded (body)	square (lower part), rounded (body)	flat	-
14	N 39.43362°, E 046.22368°, H 1691	77x45x37	horiz.	flat	flat	flat	flat	conical	-
15	N 39.43362°, E 046.22368°, H 1691	238x42x38	horiz.	flat	flat	flat	flat	conical	-
16	N 39.42640°, E 046.22491°, H 1437	263x47x43	horiz.	flat	rounded	flat	?	conical	-
17	N 39.43225°, E 046.22080°, H 1708	130x33	vert.	flat	flat	?	?	trapezoidal	-

Table 1. List of Harzhis menhirs, according to location peculiarities.

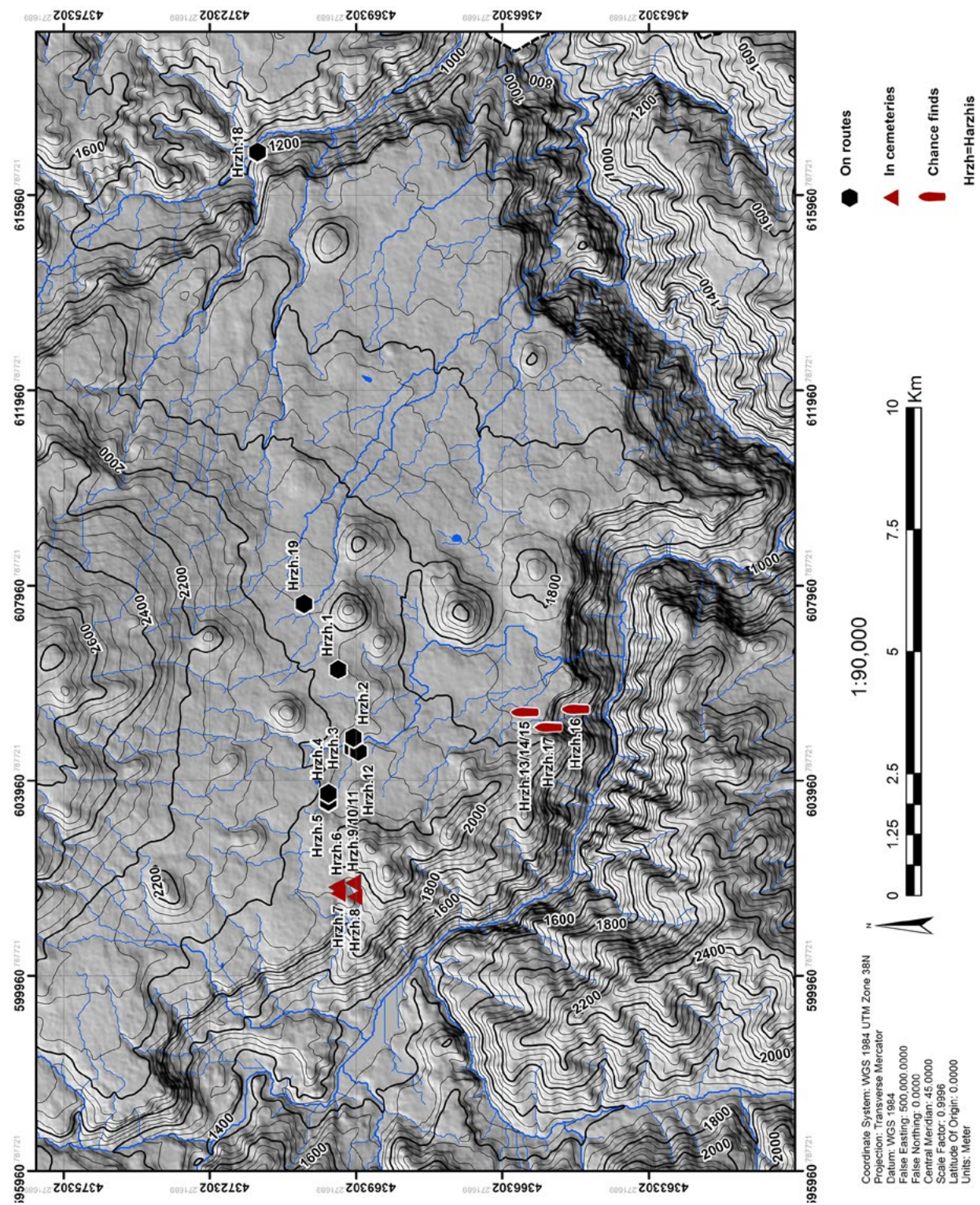


Figure 2. Disposition of menhirs of Harzhis.



Figure 3. Harzhis menhirs N 1-7.



Figure 4. Harzhis menhirs N 8-14.



15



16



17



18



19

Figure 5. Harzhis menhirs N 15-19.

these mehirs appears in the mortuary landscapes. At the same time, a secular (non-ritual) function of some units is possible: some of them could serve as boundary stones or could have been secondarily used as such. The problem of the dating of menhirs is a more complicated issue. The reason is from the one hand the lack of excavations, from the other hand the menhirs could have existed during a long period being reused in various times. In any case, it is clear that the menhirs of Harzhis must be observed in the context of megalithic complex of Armenia and the neighboring regions, which is evident in pre-Urartian period, i.e. the second half of the 2nd and the beginning of the 1st millennium BC.⁴³

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⁴³ For Early Iron Age dating of similar menhirs and their surroundings in Caucasian and North-West Iranian context cf. Kroll 1984: 107–108, 114, Taf. 6/2, 8/2–3; Schachner 2001: 305–306, Abb. 35.

The Kurgans of Gegharot: A Preliminary Report on the Results of the 2013-14 Excavations of Project ArAGATS

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Abstract: In the course of researching the Bronze - Iron Age sites of the Tsaghkahovit plain in 2013-2014 the joint Armenian-American expedition excavated two kurgans (numbers 2 and 3) near the village of Gegharot.

Kurgan 2 contained two chambers. There was no trace of human remains in the northwestern chamber, which contained a relatively rich inventory (19 ceramic vessels, a bronze sword and 12 obsidian arrowheads). This complex can be attributed to the transitional period between the Middle and Late Bronze / the first period of the Late Bronze Age (beginning of Lchashen-Metsamor culture I) and dated to the end of the 16th or the first half of the 15th centuries BC.

The central chamber of the kurgan 2 was originally a simple earthen pit constructed during the Late Bronze Age. The chamber was subsequently re-opened during the Early Iron Age when the walls were lined with stone and a new mortuary complex was deposited.

Kurgan 3 also contained two chambers. In the central earthen chamber, an 18-20 year old man was buried along with the heads and limbs of two horses with bronze bits and bronze elements of a chariot yoke, as well as a bronze statuette of a wild boar atop an anchor-shaped stand.

Six vessels were found in an adjoining chamber. There were no traces of human remains or animal bones in the chamber. Kurgan 3 can be dated to the very end of the 15th-14th centuries, or the first half of the 14th century BC (Lchashen-Metsamor culture I / II)

Keywords: Tsaghkahovit plain, Gegharot, Late Bronze Age, Early Iron Age, horse, chariot, wild boar.

During the 2013 and 2014 field seasons of the joint Armenian-American Project for the Archaeology and Geography of Early Transcaucasian Societies (Project ArAGATS), we continued a program of excavation in a field of *kurgan* tombs near the modern village of Gegharot (Aragatsotn *marz*). The tumuli that we investigated belong to a large mortuary complex that once covered a significant territory to the south and west of a Bronze Age settlement that once occupied the hill above the modern village (Figure 1).¹ The tombs

first became known in Armenia thanks to the work of H. A. Martirosyan in 1956² and S. A. Yesayan in 1960.³ Our attention was originally drawn to the mounds by Gregory Areshian in 2003 and hence this report on our continuing work in the area serves as our tribute to his enduring impact on Armenian archaeology.

Due to construction, agricultural development and land amelioration, only a portion of the original burial field remains intact. Much of it lies underneath the modern village of Gegharot where cromlech-style tombs appear to erupt out of every yard (indeed, we have conducted rescue excavations of several tombs disturbed by construction and agricultural activity). The kurgans examined by Project ArAGATS form a relatively compact group at the southern limit of the mortuary field, approximately 1.0km southeast of the fortified hilltop settlement of Gegharot, along the northern foot of a tall volcanic cinder cone in the middle of the Tsaghkahovit Plain, known as Mt. Vardablur. The kurgans were built along a terrace that overlooks the

¹ Acknowledgements: Our thanks to the Project ArAGATS team for 2013 and 2014 who supported and assisted in the excavation of the kurgans discussed here. In particular, our thanks to Hannah Chazin who helped supervise the excavations of Kurgan 2 and Thibaut Manoukian who helped supervise excavations at Kurgan 3. Our thanks also to Levon Aghikyan, Maureen Marshall, and Belinda Monahan for their help and expertise. Zooarchaeological determinations were provided by Belinda Monahan and Hannah Chazin. Evaluations of human remains were provided by Maureen Marshall. Flotation and paleobotanical analysis was conducted by Roman Hovsepyan. Geological identifications were made by Arkady Karakhanyan. Our special thanks to Armine Harutyunyan for the graphic reconstruction of a yoke (Figure 12.2). We express our gratitude to Pavel Avetisyan for consultation concerning pottery chronology and periodisation. Funding for the 2013 excavations at Kurgan 2 was provided in part by an award to Hannah Chazin from the American Research Institute of the South Caucasus. The report on her study of the recovered faunal materials is included in her 2016 dissertation from the University of Chicago. Additional funding for the Project ArAGATS investigations

of the Gegharot kurgans was provided by the Institute of Archaeology and Ethnography, NAS RA, and Cornell University.

² Martirosyan 1964: 89-93.

³ See Badalyan and Avetisyan 2007: 99-111.

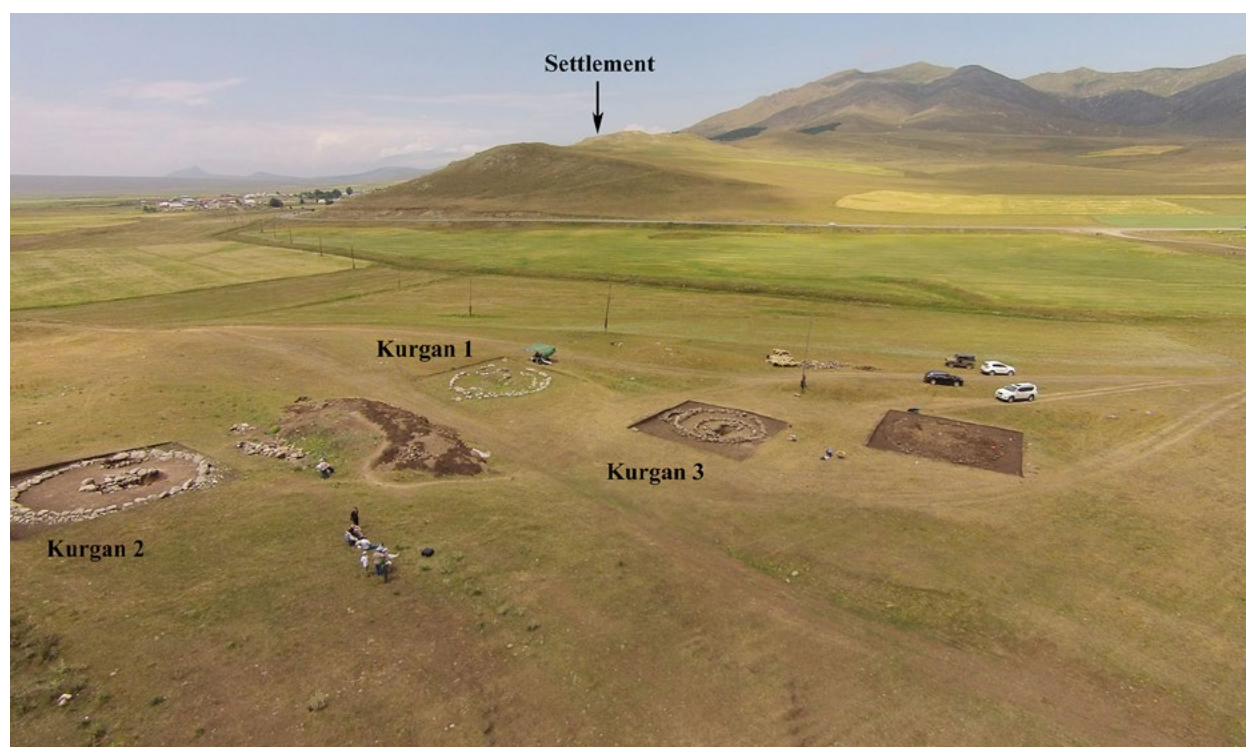


Figure 1. Aerial view of the kurgan field at Gegharot.

headwaters of the Kasakh River. While several mounds appear to have been impacted by field clearance, at least six installations appear to remain largely intact based on surficial examination.

In 2005 Project ArAGATS excavated Kurgan 1, uncovering a well-preserved multi-chamber interment dating to the transition between the Middle and Late Bronze Ages.⁴ This article presents the results of the excavations of the adjacent Kurgans 2 (excavated during the 2013 and 2014 seasons) and 3 (excavated in 2014) which have further illuminated questions of mortuary ritual, social organization, and vehicle technology during the critical phases of the mid to late second millennium B.C. when mobile communities of the Middle Bronze Age were transformed into the more centralized societies of the Late Bronze Age.⁵

Kurgan 2

Located approximately 24m south of Kurgan 1, Kurgan 2 was composed of a single circle, or cromlech, of stones, 11m in diameter, surmounted by a homogeneous earthen mound, 0.9-1.0m in height (Figures 2 and 3). The encircling cromlech was constructed of granite boulders from the nearby Gegharot glacial intrusion. The surface of the mound was covered by an uneven

layer of small pebbles which extended as far as 50cm outside of the cromlech. Part of the pebble surface was composed of small to medium pieces of limestone, a stone not locally available, which interjected patches of white amidst the otherwise grey/brown surface of the tomb. Within the earth of the mound we encountered a number of small fragments of obsidian and in the southeastern quadrant of the mound we recovered the intact pelvic bone of a large mammal, possibly *Cervus elaphus* (red deer).

The earthen tumulus overlay two burial chambers cut deep into the prehistoric ground surface. In addition, a later intrusive pit was dug into the northwest quadrant of the tumulus, cutting through the pebble surface of the mound. Inside the pit were the remains of an infant (6-12mos. \pm 6mos.) lying on its right side in a semi-flexed position oriented east-west. The burial was covered by three capstones overlain by a large rectangular stone block. The tomb contained no funerary materials making it difficult to assign a date to this interment, but the stratigraphy of the burial pit clearly suggests it was excavated after completion of the original funerary monument.

The two original funerary chambers were set in the center and on the western periphery of the monument. The area of the western chamber was partially circumscribed by an irregular semi-circular stone partition. Along the eastern flank of the chamber, the

⁴ Badalyan and Smith 2008: 45-68.

⁵ Smith 2015.

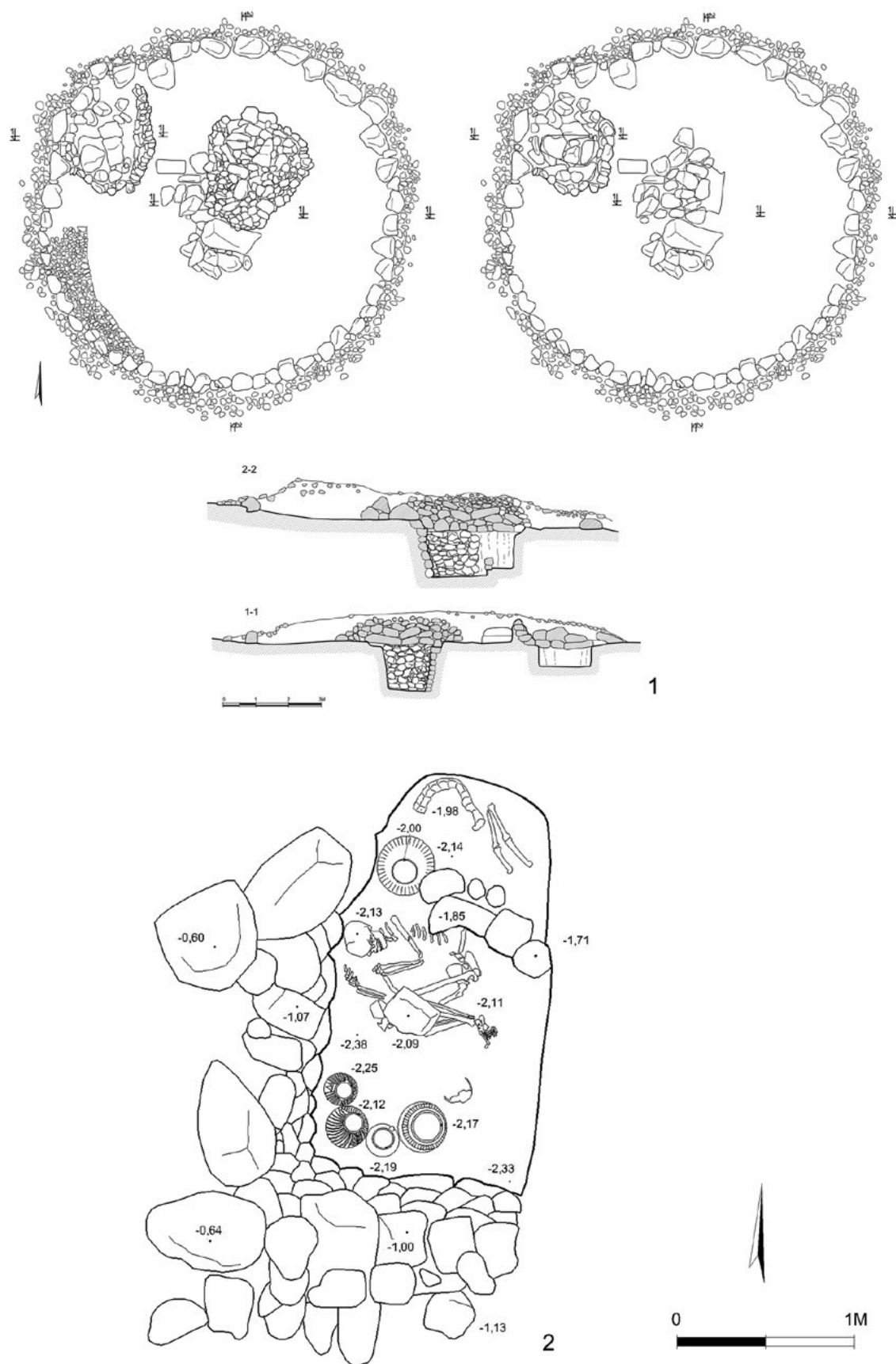


Figure 2. 1) Plan and cross sections of Gegharot Kurgan 2; 2) plan of Kurgan 2 central chamber.



Figure 3. Aerial view of Gegharot Kurgan 2.

partition was composed of 3-4 courses of stone masonry, while on the southern flank only one course of stones survived. To the north and west, the western chamber was bound by the large boulders of the kurgan's encircling cromlech. The chamber was surmounted by two granite boulders, which sat atop three stone slabs, oriented east-west, covering a sub-rectilinear earthen chamber (1.35-1.40 × 0.5-0.75m).

Directly under the stone slabs, in the eastern part of the chamber, we uncovered three ceramic bowls that formed the upper layer of the chamber's burial goods (Figure 4.6-8). The contour of the chamber was defined slightly below this upper layer of materials. The upper group of materials was underlain by a larger, more diverse ceramic assemblage, which included, most notably, a two-handled ceramic 'cauldron' (Figure 4.17) and a ceremonial vessel with four horizontal 'lobes' (Figure 4.16) on each of which rested a small jar (Figure 4.1-4). In addition to ceramics, this middle layer of the chamber's material assemblage also contained a cluster of eleven translucent obsidian arrowheads (Figure 5.6) with notched bases (a twelfth obsidian arrowhead lay slightly apart, to the northwest, of the cluster). Directly below the cluster of arrowheads lay a 'Near Eastern-type' cast bronze sword with a flanged hilt (Figure 5.8).⁶ The middle layer of grave offerings also contained caprine bones, including articulated vertebrae, scapula, and ribs.

⁶ The sword finds its closest comparanda in Group III (variant 1) of A. Piliposyan's (1999: 14-15, Figure 6) catalog of ancient daggers and swords. Most scholars (see bibliography in Piliposyan 1999) date these swords to the last quarter of the 2nd millennium BC.

Finally, a lower layer of ceramic vessels and bones was set directly on the earth floor of the chamber. Along the eastern half of the pit we uncovered three pots (Figure 4.9, 11, 14), two tall stands/censers (Figure 4.12-13, one of which held the '4 lobed' vessel), a walnut-shaped bowl (Figure 4.15) containing animal vertebrae and ribs, and a small crushed coarse-ware cup (Figure 4.5). Together in this lower layer were a few scattered animal bones (a set of articulated ribs of a large mammal, a portion of a caprine scapula, a fragment of a large mammal humerus [probably *Bos*], and a set of left and right sheep/goat radii). In the western half of the chamber were two fully articulated skeletons of young (8-12 months) sheep, which were positioned so as to mirror one another. Their heads were detached and placed atop the carcass. A ceramic vessel (Figure 4.18) was placed on the front legs of the sheep inside of which were found a goat humerus. No traces of human remains were recorded in the west chamber.

Flotation of the contents of the ceramic vessels from the west chamber recovered paleobotanical materials from only one context (locus 23). This vessel contained fragments of carbonized cereal grains (most likely barley), possibly representing the remains of a funereal meal.

In sum, the west chamber of Kurgan 2 contained 19 ceramic vessels (Figure 4; one vessel could not be restored due to its poor preservation), twelve obsidian arrowheads (Figure 5.6), and one bronze sword (Figure 5.8). Twelve vessels from the assemblage had black polished exterior surfaces decorated with multi-row 'walking comb' patterns of punctate ornamentation. The clays utilized in the production of these vessels possessed a high sand content, resulting in a relatively weak, unstable fabric that preserved relatively poorly in the shallow depositional environment of the west chamber. The 'cauldron' was unornamented with a yellow-brown exterior surface.

The material assemblages of the west chamber can be attributed to a period of transition between the Middle and Late Bronze Ages (i.e. the beginning of Lchashen-Metsamor I) that is at present dated to the late 16th and early 15th centuries BC. A wood sample from the hilt of the sword (Table 1: AA102805) provided a date of 3320 ± 110 BP (1897 – 1391 cal BC at 94.9% confidence). Obviously, the unusually large standard deviation of the determination considerably limits the utility of this result.

Slightly northeast of Kurgan 2's center, beneath the tumulus, we uncovered a pile of irregularly shaped stones covering an area approximately 3.4 × 3.8m. This stone pile was conspicuous within the homogeneous earth of the tumulus (Figure 2.1). The upper layer of

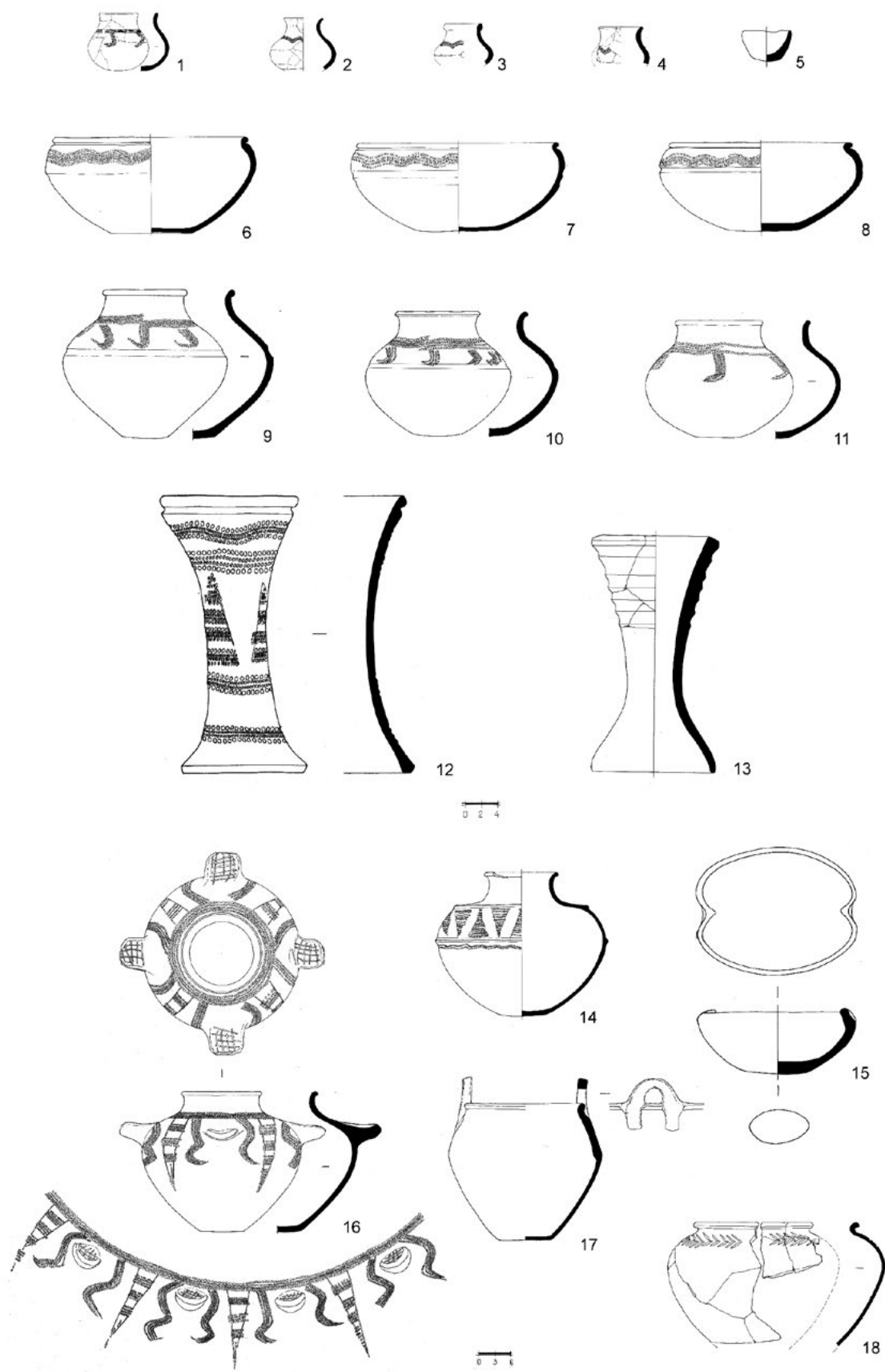


Figure 4. Ceramic remains from Gegharot Kurgan 2.

the pile consisted primarily of medium-sized blocks but also contained two very large stone slabs that lay at oblique vertical angles. The slabs appear to have been capstones for a large chamber that had been moved from their original location. Recovered from amidst the stones was a bone of a large bird. Beneath the stone pile we opened several layers of stone slabs, surrounded by a fragmentary stone ring. Among the lower layer of slabs was found another bone of a large bird.

Underneath these slabs was the kurgan's central chamber. The rectangular pit, over 2m in length, was oriented north-south and was 1.4-1.55m deep. The southern and western sides of the chamber were defined by walls of 6-9 courses of stone masonry; the northern edge was defined by a stone two-row partition; and the eastern edge of the chamber was delimited only by the borders of the earthen pit (Figure 2.2).

In the center of the chamber, we recovered the skeleton of a male, 20-23 years of age, lying in a flexed position on his right side with his head oriented to the west (Figure 6 center). His maxilla was shattered, his legs were bent at the knees, his hands were folded, and the humerus of the right hand was positioned under the skull. His left hand was in front of his face, in the space formed by the flexed humerus and radius/ulna of the right arm.

Beneath the mandible and forearm (radius) of the individual's left hand, we recovered a large cache of beads: one elongated biconical agate (?) bead, 4 of gold, 3 bronze biconical beads and 122 carnelian beads. Near his knees we recovered a belt of sheet bronze (Figure 5.7) and a bronze 'Sevan' type dagger (Figure 5.9').

Under the southern wall, in the southwest corner of the chamber, were four complete ceramic vessels (Figure 5.1-3,5). Just to the north of the vessels was another deposit of carnelian beads (n=47) and a bronze pin. Here we also uncovered two articulated caprine lower limbs (astragali and metapodials) and a blue paste bead.

To the north of the skeleton we uncovered a 'Koban' style bronze dagger⁸ with a 'flame-shaped' blade 19.7cm long (Figure 5.10).⁹ Based on our current information, this find represents the second find of a Koban style dagger in Armenia. The first comes from the 1935 excavations of E. Bayburtyan and K. Kafadaryan of burial 1 at Dimats

(Vanadzor).¹⁰ That dagger is slightly longer (21.5cm) than the Gegharot find and has a triangular stem instead of a rectangular one.¹¹ The ceramic inventory from the Dimats burial suggests that it was constructed sometime during the 13th-12th centuries BC.¹²

In the northern end of the central chamber, we also uncovered a fifth ceramic vessel (Figure 5.4) and a fully articulated partial caprine skeleton (Figure 6 right; the skull and forelimbs are missing).

As excavation of the central chamber proceeded, we discovered that a second skeleton underlay the individual interred in the upper layer of the chamber (Figure 6 left). Between them was a 20cm thick layer of earth that, along the east wall of the chamber, also contained a concentration of carnelian and paste beads. The lower skeleton was very poorly preserved, but evidence suggests it belonged to a female, over 50 years of age. The body was deposited in the southern portion of the chamber, lying on her left side in a semi-flexed position, her head to the south facing west. Under her right elbow was a bronze dagger (Figure 5.11; length 14.3cm, weight 69.3g) with a rounded tip, pronounced medial rib, short stem, sloping shoulders and symmetric drilled holes. Near her right hand, we recovered a concentration of carnelian and paste beads; near the skull, we documented a gold cylindrical bead, several small biconical paste beads and fragments of bronze rings. Around the lower skeleton's body we recovered a bronze ring, a large faience biconical pendant, and a large number of carnelian and blue and white paste beads.

The key question posed by the interments in Kurgan 2's central chamber was the chronology of their deposition vis-à-vis those recovered from the west chamber. The materials from the central chamber assemblage clearly belonged to a different phase of the Lchashen-Metsamor cultural horizon than the materials recovered from the west chamber. This impression was reinforced by our observation of the disturbed capstones above the central chamber, suggesting a later re-opening of the tomb. Lastly, the results of radiocarbon dating of the skeletal materials from the central chamber further supported a significant chronological gap between the

⁷ Cf. Piliposyan 1999, Figure 56.

⁸ Domanskij 1984, Plate 23; Kozenkova 1995, Plate 8-9.

⁹ Typologically, the dagger finds close comparanda in the type IV dagger blades from the cemetery at Tli, which Tekhov assigned to the end of the 13th through the 10th centuries BC (Tekhov 1977: 91-92, Figure 84). According to I. Motzenbäker's typology (1996: 72, Figure 35; cf. Picchelaury 1997, Figure 66), the dagger can be assigned to variant 3 form B defined by daggers with flat handles (*Griffplattendolche*). The closest analogy to the Gegharot Koban style dagger is an even longer (25.5cm) unprovenienced knife from the Caucasus currently in the collections of the Hermitage Museum (Domanskij 1984, Figure 25).

¹⁰ Historical Museum of Armenia [HMA] no.1236/85; Ghafadaryan 1941: 61, Figure 5; Khnkikyan 1991, Figure 1.7.

¹¹ Overall, a significant number of Koban bronzes have been recovered from sites in Armenia, including axes from Gyumri (former Leninakan), Parakar, Golovino (Martirosyan 1964: 124-125, Figure 50), three daggers from Burial 29 at Lori Berd, dated the second half of the 12th century (Devedjyan 2012: 24-34, Figure 1-8,9, Table XII.1), a pin with a finial in the form of two deer crania from burial 24 at Astgh Blur (Kozenkova 1972: 12-15; Yesayan 1976: 152-153, Figure 140.10). Exchange ties moving in the opposite direction have been documented in beads from the cemetery at Tli made from obsidian quarried from the Arteni deposits in western Armenia (Badalyan *et al.* 2004: 447).

¹² P. Avetisyan, pers. comm.



Figure 5. Ceramic (1-5), obsidian (6), and bronze (8-11) artifacts from Gegharot Kurgan 2.



Figure 6. Kurgan 2, central chamber. the original Late Bronze Age interment is visible at left, the later Iron Age skeleton is in the center.

Lab Code	Provenance	¹⁴ C age BP	d ¹⁴ C age	Range BC (95.4%)
AA102805	Ar/Ge.K2.8.C14.01	3,320	110	1897-1323
AA105126	Ar/Ge.K2.107.C14.01	2,939	32	1257-1034
AA105127	Ar/Ge.K2.27.C14.01	2,884	39	1207-937

Table 1. Radiocarbon determinations on remains from Gegharot Kurgan 2.

deposition of the materials in the west chamber and those in the central chamber. Table 1 summarizes the radiocarbon results from analysis of materials from Kurgan 2. Both analyses from the central chamber (AA105126 and AA105127) were conducted on bone. The determination derived from a bone sample of the lower skeleton (Ar/Ge.K2.107.C14.01) obtained a calibrated date range of 1257-1034 B.C. (at 95.4% confidence). Similarly, the determination derived from a bone sample from the upper skeleton (Ar/Ge.K2.27.C14.01) resulted in the closely synchronous range of 1207-937 BC (at 95.4% confidence). When combined, the range of the dates narrows to 1207-1024 BC with a very high likelihood of contemporaneity (91.3%).

In sum, the excavation of Kurgan 2 at Gegharot revealed three distinct episodes of interment. The earliest episode, represented in the assemblages of the

west chamber, occurred during the transitional phase between the Middle and Late Bronze Ages, dating to the end of the 16th and beginning of the 15th centuries BC. It is likely that the central chamber was also originally constructed at this time, probably as a simple earthen pit. The second episode of interment occurred some time during the Early Iron Age (Iron Ia period).¹³ Based on the current periodization of ceramic remains from the era, this event likely occurred some time during the second half of the 12th through the 11th century BC. It was during this phase of construction that the central chamber's capstones were disturbed, the original funerary assemblage removed, and stone walls set against the western and southern edges of the burial pit. The two skeletons found in the central chamber were deposited at this time, along with the funerary

¹³ Smith *et al.* 2009: 34.

assemblage documented by our excavations. Lastly, in a final episode of reuse, an infant was buried in a shallow pit dug into the tumulus mound.

The structure of Kurgan 2 is closely analogous with the structure of Kurgan 1. In both cases, the primary central chamber was augmented by a secondary chamber to the west. The deployment of an identical construction technique in Kurgan 2 casts some doubt on our prior suggestion¹⁴ that the west chamber of Kurgan 1 predated the construction of the central chamber. According to that interpretation, we hypothesized that the terminal Middle Bronze Age ceramic assemblage contained in Kurgan 1's west chamber suggested that it slightly predated the central chamber which contained only early Late Bronze Age ceramics. Hence we suggested that the west chamber might have been inadvertently enveloped into the later construction of the tumulus mound associated with the central chamber.

Based on the evidence from Kurgan 2, it now seems clear that in fact both Kurgans 1 and 2 were constructed as a single work of funerary architecture: a central chamber, the location of human interment, and a west chamber, containing remains at least partially related to the funerary feast. It is quite interesting that these feasting vessels appear to have adhered to older ceramic traditions, suggesting that either ceramic styles for mortuary rituals changed more slowly than other ware types or that mortuary feasts of the era preferentially utilized heirloomed materials.

The discovery of an intrusive Early Iron Age (Iron 1) burial in the central chamber of Kurgan 2 necessarily also revises our understanding of the Tsaghkahovit Plain's long-term settlement history. Our excavations at Gegharot and other Late Bronze Age settlements have indicated a dramatic cessation of major occupation near the middle of the 12th century BC when the region experienced a dramatic episode of widespread destruction. However, excavations at Gegharot, most notably an analysis of a suite of radiocarbon samples collected from upper layers of the site, suggest the possibility of an Iron 1 period habitation. Such a finding is now supported by investigations in the cemeteries below Gegharot where first Yesayan¹⁵ and now Project ArAGATS have documented evidence of Early Iron Age burials.

Kurgan 3

Kurgan 3 is located 15.5m east of Kurgan 1 (Figure 1). Like the other kurgans that we have documented in the area, a roughly circular cromlech (9m east-west × 8.65m north-south) constructed of granite boulders

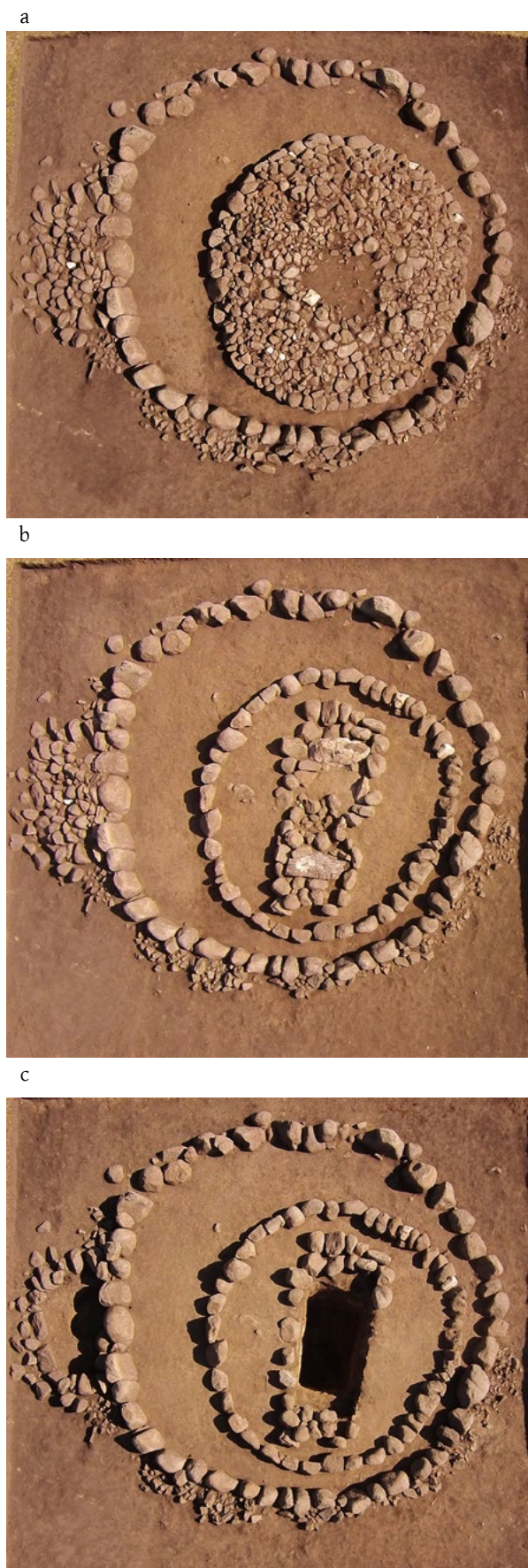


Figure 7. Aerial views of Kurgan 3 in successive stages of excavation.

¹⁴ Badalyan and Smith 2008: 61.

¹⁵ Badalyan and Avetisyan 2007: 99-111.

was surmounted by a tumulus of homogenous earth approximately 1m high (Figure 7a). The earthen mound was sealed by a layer of small granite cobbles (15-40cm), amongst which were scattered small blocks of limestone and tuff. This layer extended beyond the boundaries of the cromlech, particularly to the west. Within the tumulus we encountered a number of small fragments of obsidian and unidentifiable bone.

Beneath the tumulus we uncovered a second, inner cromlech inscribed off-center within the outer ring of stones (Figure 7b). This inner ring (6.10 north-south x 5.60 east-west) was likewise constructed primarily of granite boulders except for three tuff blocks, one at the southern limit and two in the northwest. The interior cromlech circumscribed a dense torus-shaped deposit of stone cobbles composed primarily of granite fragments with occasional blocks of limestone and tuff (sizes from 10-12 up to 35-40cm). At the center of the cobble torus was a gap, 1.60 x 1.40m in diameter (Figure 7a).

Beneath the cobble torus, the interior cromlech encircled a rectangular stone construction (5.25 x 2.0-2.3m), oriented slightly east of north-south and built of regular granite blocks. Walls of granite blocks outlined four tuff capstones: two red tuff slabs in the north and two black tuff slabs in the south. The outermost capstones were preserved *in situ*, while the middle slabs broke under the weight of the mound and subsided into the soil matrix of the chamber.

The central burial chamber which underlay the tuff capstones (Figure 7c) was a rectangular earthen pit cut into the natural clay (2.40 x 1.40-1.65m x 1.90m deep), oriented roughly north-south. The chamber contained the fully articulated remains of a single individual (Figure 8), most likely, though not definitively, male, 18-20 years of age, placed on his back with his legs rotated to the east against the chamber wall. The body was laid in a semi-flexed position with his head to the north. His right arm was bent with the ulna and radius resting across the chest. In the area of the hands we recovered 149 beads of various materials. Overall, the skeletal materials in the tomb were not well-preserved.

Near the northwest corner of the chamber lay a horse skull (*Equus caballus*) with a bronze bit in its mouth (Figure 9). A second horse skull, also with a bit, was found leaning against the west wall of the chamber. Both skulls were complete with mandibles and teeth. Near the skulls, we recovered two bronze buttons with conical umbos (Figure 10.10,11). Alongside each horse skull was a collection of *Equus* forelimbs (an almost complete set of metacarpal and carpal bones with phalanges) and hind limbs (a likewise almost complete set of metatarsals and phalanges). The horses appear

to have been between 6 and 11 years of age at the time of death.

In the northern half of the chamber were seven complete and one fragmented ceramic vessels arranged in a line running southwest-northeast (Figure 11.7-13). Inside the southernmost vessel (Figure 11.7), we discovered a bronze statuette of a wild boar set on an anchor-shaped stand (Figure 12.1). Near this vessel, we also recovered five obsidian arrowheads (Figure 10.5) affixed to the decayed remains of wooden arrow shafts. In the western half of the chamber between the ceramic vessels and the horses' skulls was a dome-shaped bronze button (Figure 10.8), a cross-shaped buckle (Figure 10.6) and a cross-shaped pendant (Figure 10.7).

Near the southwest corner of the chamber were the remains of the front limbs of a large mammal (probably *Bos*), including the scapula, humerus, radius and several carpal bones and ribs.

The chamber also contained a unique assemblage of bronze artifacts that appear to comprise elements of a yoke. Near the southeast corner, we located a bronze plated tube that was closed at one end and open at the other (Figure 10.11). Affixed to it was a ring-shaped terret, a kind of grommet unique to animal-drawn vehicles such as carts, carriages, or chariots that serves to convey the reins between the bit and the driver. Two additional bronze terrets (Figure 10.13, 14) were found near the center of the chamber. And a second bronze tube with an affixed terret (Figure 10.12) was found near the northwest corner. Inside both tubes we found decomposing wood remains, most likely the terminal ends of the yoke. The boar statuette appears to have been part of this same assemblage, tumbling into the pot where it was found as the yoke decomposed. Given the equine heads and forelimbs also found in the tomb, it is most likely that the yoke was part of a transport or military vehicle drawn by a team of horses, as illustrated in Figure 12.2, rather than, for example, a plough drawn by a large bovid.

The wood remains from the yoke was identified as elm (*Ulmus* sp.) by the Cornell Tree-Ring Laboratory, a species whose strength and plasticity makes it particularly well-suited for the kinds of pressures that a harnessed team would have exerted pulling a wagon or chariot.¹⁶ Present-day species of *Ulmus* in the Lesser Caucasus include *Ulmus laevis* and *Ulmus minor*, which thrive in water-rich areas of the lower subalpine forest belt.

Analysis of the wood remains revealed that only 5 rings remained, rendering the tree-ring sequence too short

¹⁶ Our thanks to Brita Lorentzen for the species identification of the yoke samples.

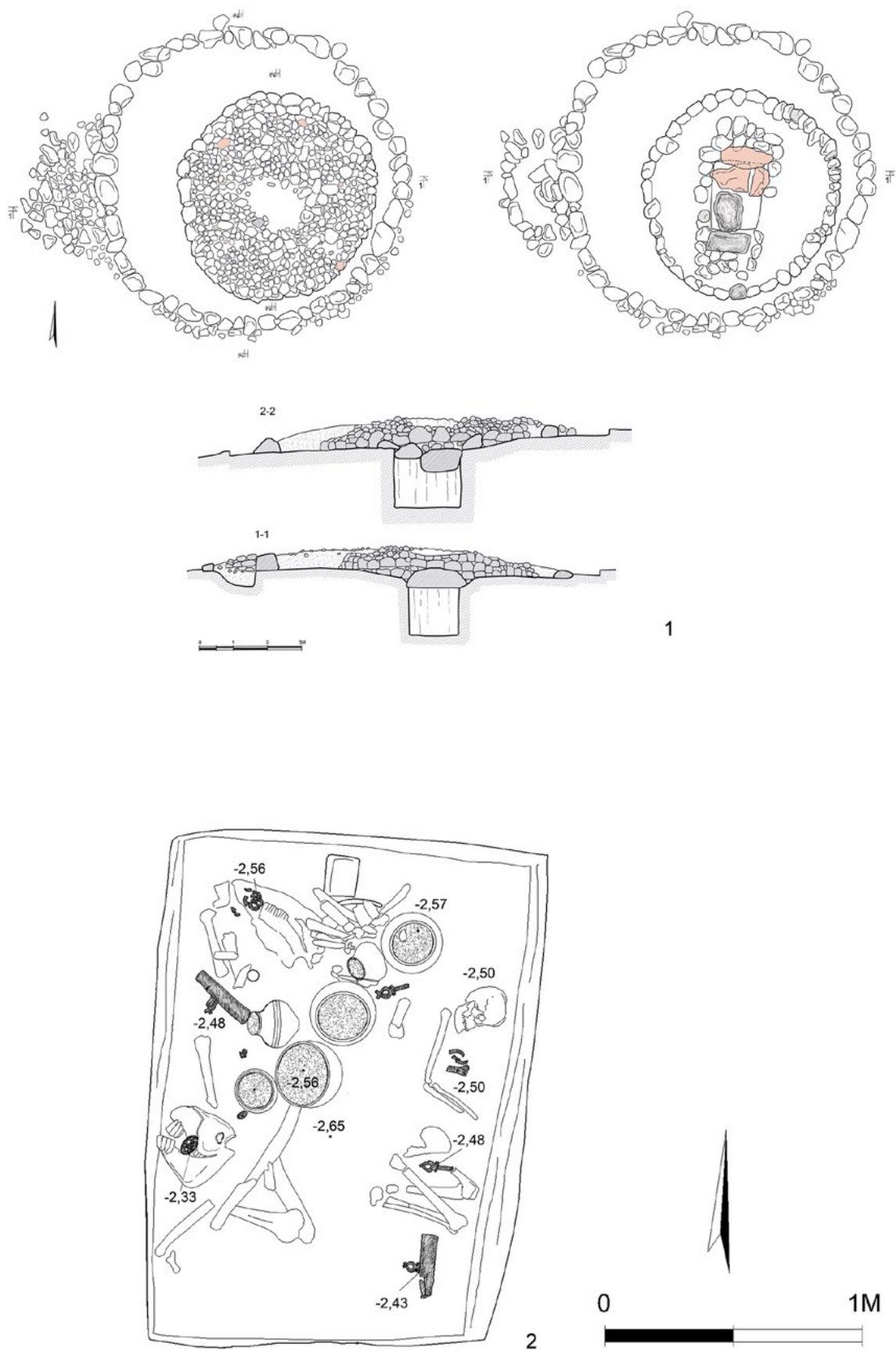


Figure 8. Gegharot Kurgan 3. 1) Plan and cross section of the kurgan; 2) plan of the central chamber.



Figure 9. Detail of horse skull with bronze bit from Gegharot Kurgan 3's central chamber. 23 – Figure 1 Figure 10 Figure 10:

for both dendrochronology and ^{14}C wiggle matching. So two samples drawn from the same ring were sampled for AMS dating (AA105137 and AA105138). Table 2 presents the raw results of the analysis and Figure 14 the combined calibration of these two determinations. The two are consistent with the hypothesis that they represent the same age and suggest a date for the completion of Kurgan 3 in the 15th-14th centuries BC. This date is consistent with the ceramic complex recovered from the chamber, which can be assigned to the Lchashen-Metsamor I/II group of the initial Late Bronze Age.¹⁷ The ceramics from the central chamber are comparable to those recovered from the central chamber of Kurgan 1.¹⁸

Abutting the western extremity of Kurgan 3's encircling cromlech was a small, irregular secondary ring of stones, constructed just under the cobble layer that sealed the tumulus. This secondary cromlech (2.2 × 1.3m) was built of relatively small pieces of granite. Beneath the surface layer of cobbles were three large

irregularly shaped capstones, under which opened a shallow (about 40cm) earthen pit (1.25 × 1.10m). This west chamber contained six ceramic vessels (see Figure 11.1-6). We found no trace of human remains or animal bones in this chamber. Typologically, the ceramic complex of the west chamber can be assigned to the Lchashen-Metsamor II group.¹⁹

The inventory of Kurgan 3's central chamber is so distinctive that it warrants a full summary. The chamber included:

- Seven ceramic vessels (Figure 11.7-13);
- 95 carnelian beads, including large spherical (7-8 × 10mm), pear-shaped (9-11 × 7-9mm) and small discoidal (2.5-4.0 × 5.0-6.0mm) samples (Figure 10.2);
- Two disc-shaped bone beads (8.5-9 × 5-6mm) with ribbed surfaces (see Figure 10.4);
- A bone pendant in the shape of a frog (13 × 7mm, 0.4g) with a drilled transverse hole (Figure 10.1);²⁰
- Paste/faience beads of various shapes, sizes and colors (Figure 10.3);
 - cylinders 13.5-19mm long and 8.5-9.6mm in diameter with whitish blue and turquoise surfaces (n=5);
 - tapered cylinders, 10-17mm long and 6-6.8mm in diameter, with vertical striations and blue-turquoise, light beige, beige and brown striped and white-beige surfaces (n=4);
 - a cylindrical bead with carved oblique lattice patterns, 6.8mm long and 4.9mm diameter;
 - spherical beads 6-11mm long and 10-15mm in diameter with whitish, beige and gray, gray-brown, white-blue surfaces;
 - discoidal beads 2.6-3.7mm long and 7-7.2mm diameter, with whitish-blue and turquoise/gold glitter surfaces;
 - a biconical bead with incisions 7.5mm long and 11.3mm in diameter with a light blue surface;

¹⁹ Smith *et al.* 2009: 68-77.

²⁰ The find has no direct analogies, but renderings of frogs are well known from the assemblages of contemporaneous sites, including a paste pendant from burial 446 at Artik (Khachatryan 1975: 214-215; 1979: 81, 309; HMA no. 2346/412), a frog negative found on a casting mold found at Gegharot fortress (Ar/Ge.T2.E208) (Badalyan *et al.* 2005, Figure III.1), a gold bead from Kurgan II at Lchashen (Kalantaryan 2007, Figure XLI.1; Mnatsakanyan 1961: 70, Figure 24-1), sculptures at the ends of the bronze stands decorated with figurines of birds from Lchashen Kurgan 1 (Mnatsakanyan 1957: 2, Figure 13; Yesayan 1980: 52, n. 150, Figure 31.1; HMA no. 2007/12) and Kurgan 2 (Avetisyan *et al.* 2008: n. 18; HMA no. 2009/50), openwork bronze figurines on cart pieces with lion sculptures (Lchashen Kurgan III) (Yesayan 1980: 27, 54, Figure 37-2,3; HMA no. 2009/51, 52), and lastly an agate weight bearing a Babylonian inscription from tomb 8 at Metsamor (Khanzadyan *et al.* 1983: 113-122).

¹⁷ Smith *et al.* 2009: 73-81.

¹⁸ Badalyan and Smith 2008: 61.

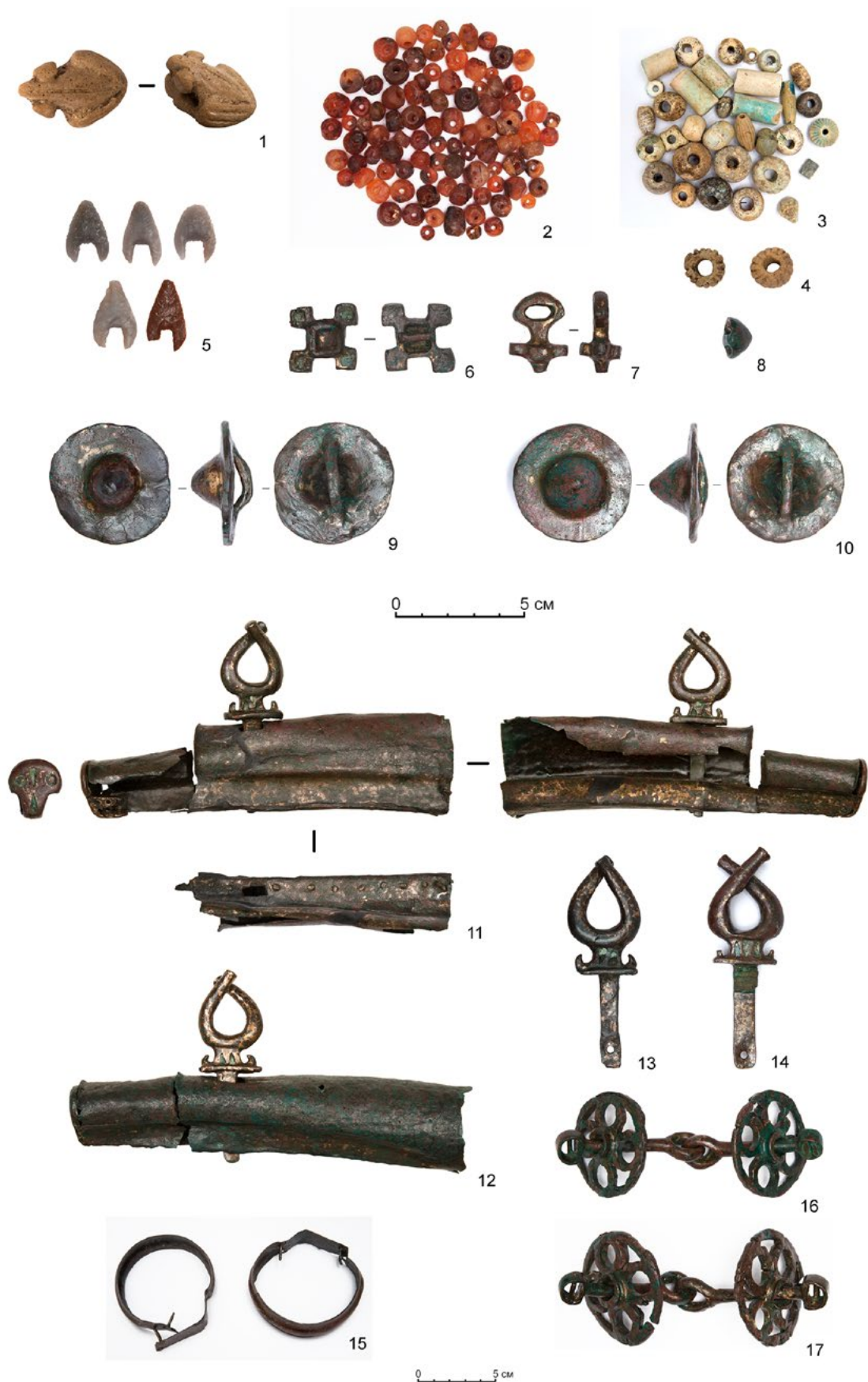


Figure 10. Bone (1, 4), carnelian (2), paste/faience (3), obsidian (5), and bronze (6-17) artifacts from Gegharot Kurgan 3.

Lab Code	Provenance	¹⁴ C age BP	d ¹⁴ C age	Range BC (95.4%)
AA105124	Ar/Ge.K3.28.C14.03	3,069	39	1420-1226
AA105137	Ar/Ge.K3.28.C14.01	3,223	67	1662-1311
AA105138	Ar/Ge.K3.28.C14.02	3,098	47	1491-1231

Table 2. Radiocarbon determinations on wood remains from Gegharot Kurgan 3.

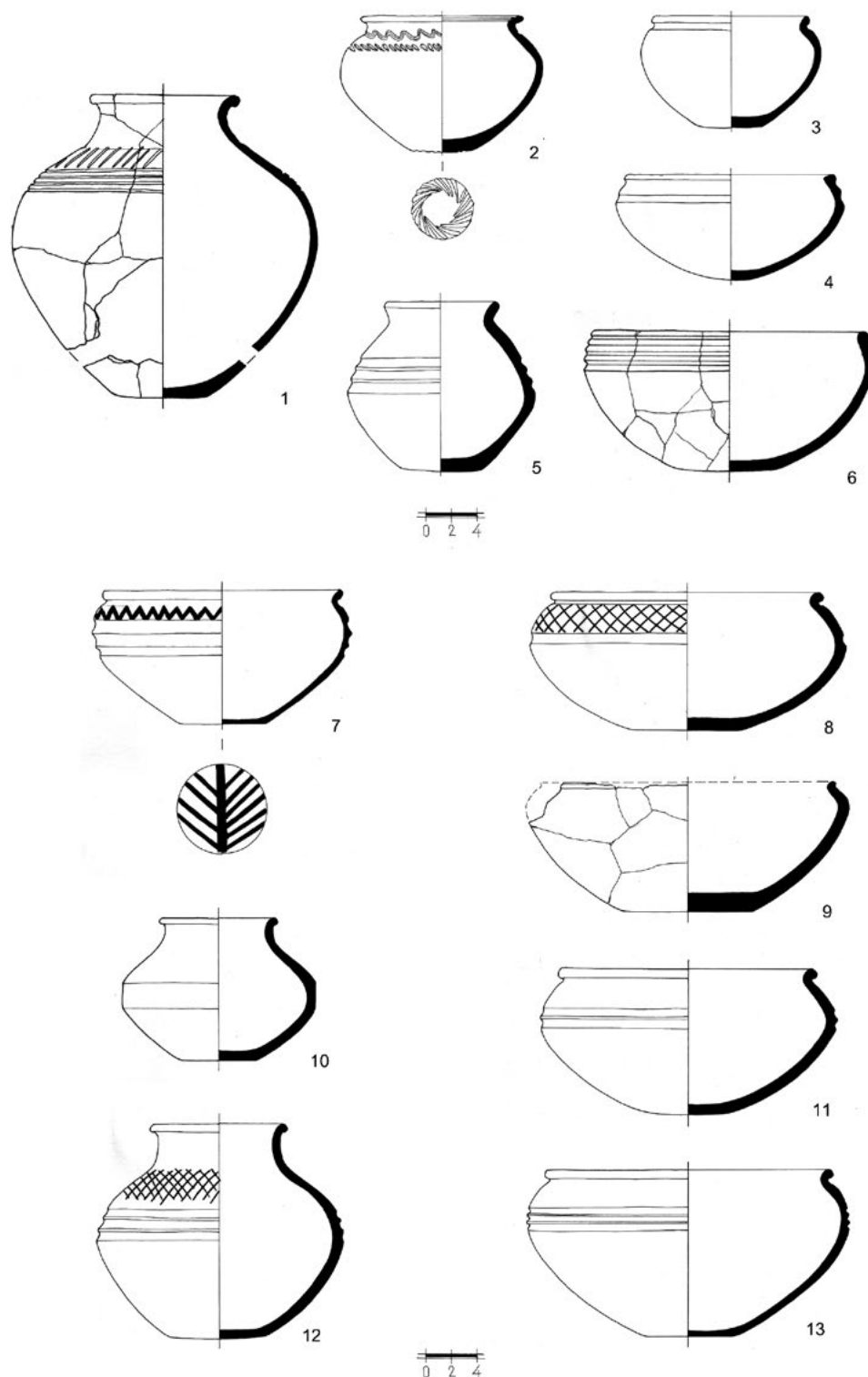


Figure 11. Ceramic remains from Gegharot Kurgan 3.

- a beige bead in a rhombic prism shape with vertical surface depressions (7.2 × 11.6 × 10.8mm);
- a blue and white, pyramid-shaped bead (9.8 × 8.6 × 8.3mm) in the form of a bird's head with a flat base carved in a pattern that resembles a frog's folded legs.
- Five obsidian arrowheads with rectangular or trapezoidal notches in the base (Figure 10.5), 2.5–2.8cm long;
- Two bronze two-part snaffle bits (250.3 and 255.4g) with disk-shaped open work cheek-pieces (Figure 10.16, 17)²¹
- Two disk-shaped bronze buttons (4.5 and 4.2cm in diameter; 27.5 and 28.7g) with a conical umbos (2.2cm) and an interior loop (Figure 10.9, 10);
- A single conical bronze button (Figure 10.8) with an interior loop (1.5cm diameter, 5.2g);
- Bronze cruciform pendant with large central eye (Figure 10.7; 2.85cm × 2.1/1.4cm wide, 14.3g);
- A square bronze buckle with four rectilinear lobes (Figure 10.6, 2.4 × 2.4cm, 10.7g);
- Four bronze terrets in the form of curved horns with overlapping tips. Two (Figure 10.13, 14) were found separately (11.9 and 12.2cm, 94.2 and 106.3g) while two were attached to bronze tubes. (Figure 10.11–12, 13.5 and 13.7cm, 140.2 and 169.0g).²²
- Two bronze plate open hoops (7.0cm diameter, 19.7 and 20.4g), thickened in the middle (1.8cm) but flattened at the ends, each of which was pierced with bronze tacks (Figure 10.15);²³

²¹ Comparanda are known from burial 79 at Artik (Khachatryan 1975: 218; 1979: 31, 142), Kurgans II (Mnatsakanyan 1957: 152; HMA no. 2007/113–117), III (HMA no. 2009/58, 59), and VIII (HMA no. 2009/420) at Lchashen, Akhpradzor (Lalayan 1931: 192–193, Figure 184), Alaverdi (Martirosyan 1964: 225, Figure 88–1, 2), and sites in Georgia (Picchelaury 1997, Figure 91, s.62, NN 1724–1728; Sultanishvili 2008: 379–396).

²² Analogies for these terrets are known from Hatsarat (Martirosyan 1964, Figure X.2; Mikaelyan 1968, Figure 47–4), burial 7 at Lori Berd (3 examples), Kurgans II (Mnatsakanyan 1957: 153; HMA no. 2007/71–79), III (HMA no. 2009/92–94, 103), and VIII (HMA no. 2009/430) at Lchashen, burial 48 at Shirakavan (Torosyan *et al.* 2002, Figure 5), Kurgan 4 at Berikldeebi (Miron and Orthmann 1995, Figure 95, no. 151; Mansfeld 2001), and Kurgans 1 and 2 at Garajamirli (Surkhaev 2005, Figure 11–12). It is important to note that these items were almost unanimously described as terrets by the archaeologists who documented them (Devedjian, Mnatsakanyan, Mansfeld, Surkhaev). Only the Shirakavan finds were described as bow ornaments (Torosyan *et al.* 2002: 42). In light of a more systematic examination of the objects recovered from graves 44 and 48 at Shirakavan, their interpretation as bow elements can no longer be justified (cf. Badalyan and Avetisyan 2007). In burial 44 the excavators recorded the basket of a wagon, two crossbars at right angles, the osteological remains of two horses, and two bronze bits. Thus the finds that were previously thought to be elements of a bow must clearly instead have been parts of a yoke.

²³ Similar bronze hoops have been recovered from several complexes. In burial 7 at Lori Berd (Devedjian 1981: 27), the excavator described 'remains of cylindrical shaped wood encircled by bronze belts.' In Kurgan 1 at Lchashen, the 'yoke of the cart was studded with bronze hoops' (Mnatsakanyan 1957: 149, Figure 3). In addition, the 'bows' of graves 44 and 48 at Shirakavan were each outfitted with cylindrical bronze hoops (Torosyan *et al.* 2002: 42).

- Two tubular bronze fittings for the ends of a wooden yoke (Figure 10.11, 12). The tubes (22.0 and 23.7cm long, 80.8 and 101.2g) taper from opening to end. Each has a terret (described above) affixed to the tube with bronze tacks. Both tubes contained the remains of elm wood (see above).²⁴
- A bronze cast statue of a wild boar atop an anchor-shaped base (Figure 12.1);²⁵

It appears likely that most of the bronze artifacts from the central chamber of Kurgan 3 – the bits, buttons, pendants – were elements of a harness. It is also clear that other bronze elements – the tubes, terrets, and boar statuette – were mounted symmetrically on a long wooden bar made from elm. This bar would have been approximately 165cm long and, judging by the diameter of the bronze hoops, about 7–7.5cm in diameter. Figure 12.2 provides a possible reconstruction of how this collection of yoke and harness pieces might have been employed. The entire assemblage, along with the head and hooves horse remains, appears to provide a synechdochic (*pars pro toto*) representation of a chariot.

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²⁴ The clearest comparanda are those from Kurgans III (HMA 2009/92, 93) and VIII (HMA 2009/425) at Lchashen.

²⁵ The total height of the artifact is 11.1cm with the boar figurine 4.0cm tall × 5.3cm wide. The object weighs 177.9g. Similar items have been found with figurines of birds (Hatsarat, Lchashen, Lori Berd, Metsamor, Kuchak), lions (Oshakan, Nerkin Dvin), horses (Noyemberyan), deer (Lchashen, Lori Berd), bulls (Lchashen), goats (Artik), and a human with a lion (Shirakavan). In Gegharot Kurgan 3 we find the boar image for the first time in the Caucasus. The anchor-shaped base most likely would have been attached to the center of the yoke's crossbar or at the end of the drawbar (Figure 12.2).

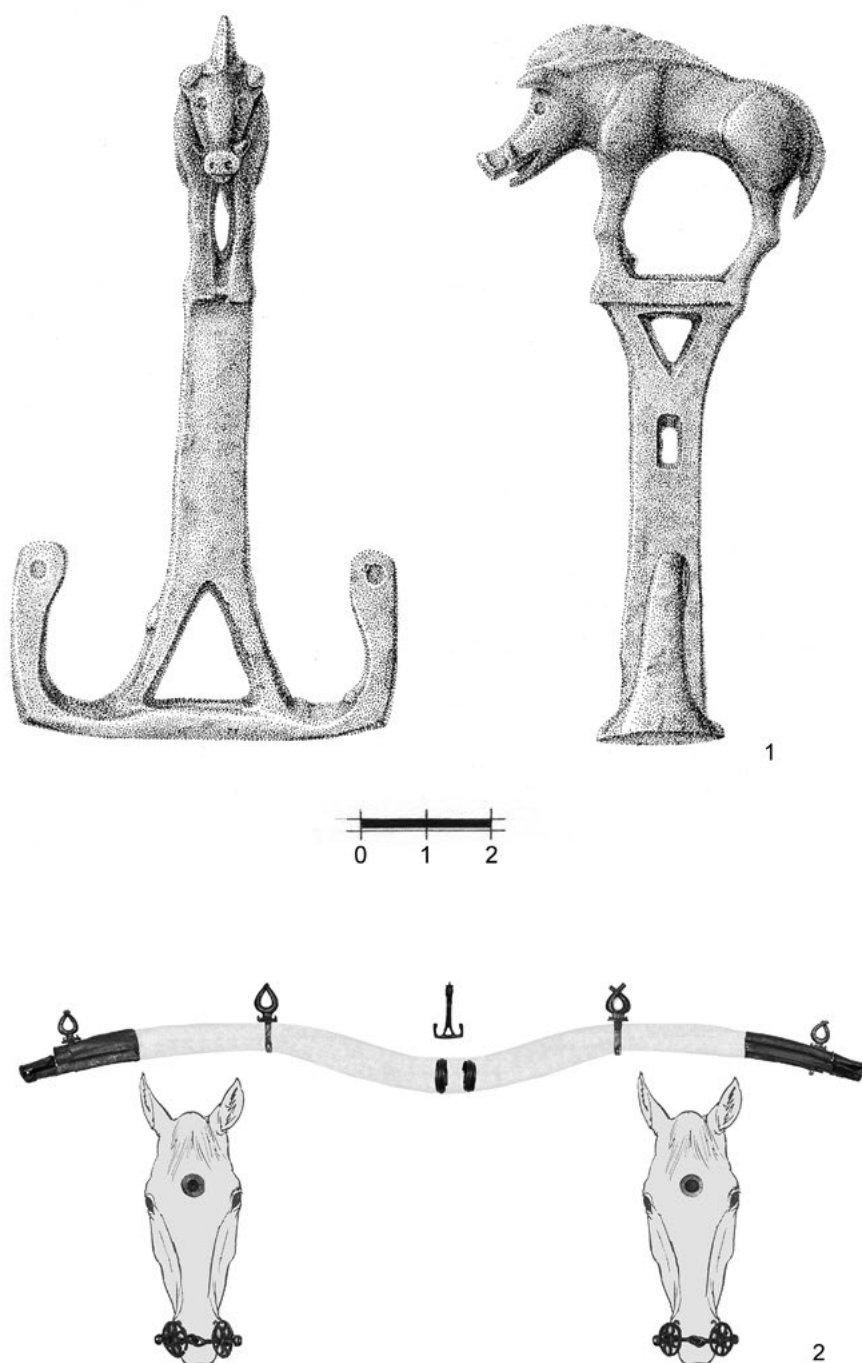


Figure 12. Remains from Gegharot Kurgan 3. 1) Bronze boar statuette atop anchor-shaped base; 2) reconstruction of yoke and harness assemblage.

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Figure 13. Detail of yoke piece and terret from Gegharot Kurgan 3.

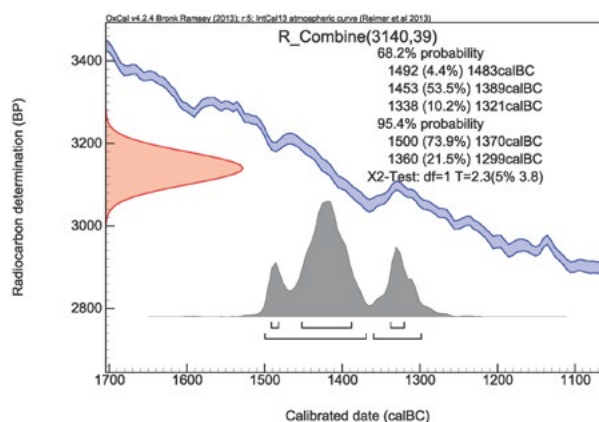


Figure 14. Combined 14C determination for samples from Gegharot Kurgan 3.

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Capacity Marks on Depata from Troy

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Abstract: With more than 60 finds Troy remains as central site of production of a two-handled vessel defined by Heinrich Schliemann as *depas amphikypellon*, which was continuously used during the periods Troy II-V. Among the finds from Schliemann's excavations there were on the whole seven depata with markings, however only three of them are now present in the Schliemann Collection at Berlin. They represent a connection of vertical and horizontal lines carved under the vessels. It is evident, that the quantity of horizontal signs increases (4-5-6 lines) according to increasing of their sizes (12-20-25cm) and capacity (100-500-1000 millilitre). This is a regularity which suggests that the signs could mean certain measure of capacity, with a system based on conception of 10 (or may be 50 and 100). Similar signs appear on other pottery types, as well as on decorated spindle-whorls, balance weights, sickles from Troy and elsewhere, which concern to measures and premonetary means of exchange. While putting the data from Troy in a wider cultural context we see that the site was well integrated in developments of Anatolian-Eastern Mediterranean cultural world at the second half of the 3rd millennium BC.

Keywords: Troy, depas, potters' marks, capacity and weight units, end of the Early Bronze Age, culture transfer

Introduction

A two handled vessel with oblong body,¹ defined by Heinrich Schliemann as *depas amphikypellon*² and classified by Carl Blegen under the type A 45³ appears first in Troy IIc and continues its existence in Troy III-IV and perhaps also in Troy V. With more than 60 finds Troy remains as central site of depas production, from where it was spread in western, central and southern Anatolia, the Aegean, south-eastern Bulgaria and northern Syria. This type of vessel is well known and good investigated in special literature.⁴

From the first publications we knew that among the finds from H. Schliemann's excavations there were on the whole seven depata with markings. Among them there was a depas with simple 'Grundstrich' and second one with two parallel 'Grundstriche'.⁵ The third depas had an incised sign of 'achtspeichigem Rad' under the vessel, made after baking.⁶ The fourth one had pressed 'Halbmond' as sign under the vessel, made before baking.⁷ These four depata have been not published completely by former scholars. Unfortunately we

could not identify them in the Schliemann Collection at Berlin.

The next three depata with similar to each other horizontal and vertical lines as signs (Figure 1) are present today in the Collection and appear to be the main point of study of the present article. We shall try to 'decipher' these signs and consider them in a broad cultural context of the second half of the 3rd millennium BC.

History of research

The information on the mentioned three depata have been published first by J. Poppelreuter in 1895 during reorganization of H. Schliemann's finds in the Berlin Museum für Vor- und Frühgeschichte by the publisher and by A. Brückner.⁸ As the author himself notes, for the publication of Trojan 'Schriftzeichen' the article of A. Evans⁹ on Aegean pictographs played an important role. These depata are mentioned then by H. Schmidt in 1902,¹⁰ who ranked them among the finds of Troy II-V. The depata and their signs have been partially considered also by M. Hood,¹¹ K. Balfanz,¹² J. Zurbach,¹³ A. Bobokhyan¹⁴ and E. Völling.¹⁵

H. Schliemann also has considered these signs, however coming out not from depata proper but in the context of spindle-whorls, which bear similar markings.¹⁶ That

¹ For support and exchange of ideas in the process of preparing of this paper we would like to thank Dr. Alix Hänsel, Museum für Vor- und Frühgeschichte at Berlin, Dr. Emily Schalk, Berlin, Dr. Devrim Çalış-Sazcı, University of Çanakkale, Dr. Petar Zidarov, University of Sophia and Dr. Lorenz Rahmstorf, University of Mainz.

² Schliemann 1881: 337ff.

³ Blegen *et al.* 1950: 230.

⁴ Çalış-Sazcı 1999; 2006: 203, 205-206; Gaedtko-Eckardt 2008: 317-318; Korfmann 2001: 363, Figure 398, 399; Podzuweit 1979: 151ff.; Rahmstorf 2006a: 52-55, Figure 3-map; Spanos 1972; Spanos, Strommenger 1993: 573.

⁵ Poppelreuter 1895: 211, without image of the object. The author brings no data, if the signs are under the vessel, made before or after baking (cf. also Zurbach 2003: 127).

⁶ Poppelreuter 1895: 211, without image of the object; Schmidt 1902: no. 2034; Zurbach 2003: 127.

⁷ Poppelreuter 1895: 211, without image of the object; Schmidt 1902: no. 2033; Zurbach 2003: 118, 124, Figure 12.

⁸ Poppelreuter 1895: 211; cf. Saherwala 2008: 15.

⁹ Evans 1894.

¹⁰ Schmidt 1902: 90, no. 2030, 2031, 2032.

¹¹ Hood 1961: 216.

¹² Balfanz 1995: 134-135.

¹³ Zurbach 2003: 118-119, 124, no. 13-15.

¹⁴ Bobokhyan 2008a: 165, Figure 84-85.

¹⁵ Völling 2008: 236, 240, 241.

¹⁶ Schliemann 1884: 137-138.



Figure 1. Depata Sch. 2030, 2031 (Tr. 81) and 2032 with corresponding signs on their bottoms, Schliemann Collection, Berlin (Photo by A. Bobokhyan, with permission of Schliemann Collection)

H. Schliemann was not aware of special importance of these markings as signs on depata demonstrates also the case when mentioning them on one round object of terracotta from his Sixth settlement, he brings a parallel of the same sign under a vase from Csernathal in Siebenbürgen,¹⁷ however without mentioning of the similar case on Trojan depata.

Description

In 2005 we identified these very depata in the Schliemann Collection at Berlin. Here is their description:¹⁸

Sch. 2030. State: complete, Preparing: wheel-made; Surface: reddish, polished; Sign: one vertical and four horizontal lines under the vessel, incised before baking; Height: 12cm; Capacity: ca. 100 millilitre (till the marked part), ca. 150 millilitre (till the edge of the rim); Dating: Troy II-V; Image: Figure 1/1.

Sch. 2031 (Tr. 81). State: broken; Preparing: wheel-made; Surface: reddish, polished; Sign: one vertical and five horizontal lines under the vessel, incised before baking; Height: 20cm; Capacity: ca. 500 millilitre (till the marked part), ca. 570 millilitre (till the edge of the rim); Dating: Troy II-V; Image: Figure 1/2.

Sch. 2032. State: broken; Preparing: wheel-made; Surface: brown, polished; Sign: one vertical and six horizontal lines under the vessel, incised before baking; Height: 25cm; Capacity: ca. 1000 millilitre (till the marked part), ca. 1100 millilitre (till the edge of the rim); Dating: Troy II-V; Image: Figure 1/3.

To check the capacity of no. Sch. 2030, the only complete depas among the three, we filled it with sand, getting ca. 100 millilitre till the part, which was marked through the slip and ca. 150 millilitre till the edge of the rim. The capacity of the next two depata should increase correspondingly. However, while they are broken, to define their capacity, we used the formula of counting of the volume of cylindrical and similar objects ($V = \pi r^2 h$, where V = volume, r = radius, h = height).¹⁹ Accordingly, we got ca. 500 millilitre till the marked part and ca. 570 millilitre till the edge of the rim for Sch. 2031 (Tr. 81) and ca. 1000 millilitre till the marked part and ca. 1100 millilitre till the edge of the rim for Sch. 2032. The data got from the measuring of the two broken depata are though relative, however, on the whole, very logical, implying that the quantity of horizontal lines increases according to increasing of sizes and capacity of the vessels.

Parallels

This type of the sign,²⁰ i.e. horizontal and vertical lines connected with each other, is well known in different parts of the Ancient World and appears also in many ancient scripts, alphabets and numeration systems.²¹ However, the coincidences of similar signs in various times and in different regions could be in many cases result of convergent developments. Paralleling of similar signs can be proclaimed as a result of real contacts only in that case if we have systematic, contextual and logical relations between the sites or cultures compared.

¹⁹ Developed practices of measurements of volumes of cylindrical vessels is known first in Mesopotamia since the Ur III and Old Babylonian periods, end of the 3rd and beginning of the 2nd millennium BC, according to the texts of mathematical problems (Vaiman 1976).

²⁰ For theoretical background towards early signs cf. Marangou 2001: 11ff. For the problem of functional interpretation of marks on Bronze Age ceramics (designation of potters, their names, property, volumes, contents, ornaments etc.) cf. Genz 2002b: 113. In this case it is especially important to take into consideration, if the signs have been incised or painted before or after baking. If they have been made before, it would mean they are potmarks, i.e. they have special meaning (Zurbach 2003: 118, 127; cf. Hirschfeld 2008: 302).

²¹ Cf. e.g. Döring 1949: Figure 1ff.; Friedrich 1966: Figure 1ff. Also on the so called 'inscriptions of Hissarlik' defined by A. Sayce there are comparable signs (Sayce 1881: 766ff.; cf. also Zurbach 2003). For similar Egyptian hieratic signs, designating a determinative for elbow measure, cf. Müller 1965: no. I/455-464, III/436-447. In Attic system of numeration such signs were used first of all to designate weight units such as drachm nad talent (Vygodskiy 1967: 244-245).

¹⁷ Schliemann 1881: 671.

¹⁸ The Sch. - numbers at the Schliemann Collection at Berlin correspond to H. Schmidt's catalogue (Schmidt 1902) numbers. Tr. - numbers go back to old numbers, and mean 'very probably from Troy'. In the case of Sch. 2031 (Tr. 81), it derives surely from Troy.

So, as to such parallels of the marks on depata, first we should note that identical signs are known also on other artefacts from H. Schliemann's excavations, among them - holed objects, decorated spindle-whorls²² (Figure 2), balance weights.²³ Horizontal and vertical lines as signs, however in other connection than that of depata, are present also on Trojan Late Bronze Age ceramics.²⁴

From Anatolia of the 3rd millennium BC such signs are known on a vessel from Kültepe²⁵ as well as on a stamp-seal from Kusura.²⁶ They come out also on the painted pottery of Malatya-Elazığ region from the second half of the 3rd millennium BC.²⁷ The same signs are seen on Minoan ceramics from Mallia in Crete.²⁸

Similar signs, designating some art of divisions, are present also on other artefacts than ceramics from the Near East and the Aegean, among them on balance weights²⁹ and other measuring implements,³⁰ as well as on prehistoric sickles from the Middle European hoards, to be interpreted as premonetary means of exchange.³¹ The same signs are known on the alabaster statues of North-Caucasian culture, end of the 3rd millennium BC, which have eastern Mediterranean parallels and are interpreted as possible balance weights.³²

The most intriguing parallel, which can be traced just in the historical and cultural context, is however the case of Ebla, a well known site in northern Syria. So, the same marks as at Troy are to identify on two semi-ovoid balance weights of basalt from that site dating to the Early Bronze Age IVA, in the frames of 9.4g *shekel* and of 467.5g *mina*, divided by 50. One of them, in addition to the groove indicating 1 *mina*, shows 5 and

another one 4 incisions horizontal to it, which means correspondingly 1 *mina* and 1/5 and 1 *mina* and 2/5.³³ Especially important is the context of finds of these weights. They have been found in the small square room L.2712 together with five other limestone and basalt weights, marked with grooves and incisions. More than 250 administrative texts concerning the delivery of food rations (principally meals and oil) for personnel and members of the royal bureau were found in the same place. The presence of 25 ovoidal clay objects could be possibly also connected to the some kind of common weighing activity. These weights could represent the 'official' weights of the administrative area as conformed by the presence of the economic tablets in the same room.³⁴

So, the Trojan signs under consideration appear on other pottery types, as well as on decorated spindle-whorls, balance weights, sickles, which concern anyhow with measuring implements and premonetary means of exchange.

Former interpretations

Already H. Schliemann noticed about the sign (one horizontal and three/four perpendicular lines) as very important in Troy bringing their first parallels: *'Diese auf den trojanischen Altherthümern so sehr häufig vorkommenden Zeichen finden sich auch in Relief oberhalb der Thür und auf der Hinterseite fast jeder der unter dem Peperin unweit Marino bei Albano oder in alten Gräbern bei Corneto entdeckten Hüttenurnen, mit dem einzigen Unterschiede, dass sie hier etwas mehr verziert sind. Wir finden es unmöglich, mit L. Pigorini und Sir John Lubbock anzunehmen, dass diese Zeichen dazu bestimmt waren, die Fenster der Hüttenurnen anzudeuten, um so weniger, als auf beiden Seiten der letztern, unmittelbar oberhalb jener Zeichen, dreieckige oder halbrunde Oeffnungen mit hervorstehendem Rahmen angebracht sind. Ebensowenig kann ich mit Prof. Virchow annehmen, dass diese Zeichen 'vielleicht eine Giebelthür oder Luke, welche geöffnet werden konnte, vielleicht auch nur eine zur grossern Festigkeit der schrägen Giebelfläche angeordnete Konstruktion' bedeutet'*.³⁵ H. Schliemann brings more parallels of these signs on 'Hüttenurnen' and also on spindle-whorls from pre-Etruscan cultures of Italy and than writes: *'Prof. A.H. Sayce theilt mir mit, dass das Zeichen sich unter den hethitischen Hieroglyphen befindet, und, wie einige Gelehrte vermuthen, einen Stuhl darstellt. Derselbe Freund sagt mir, dass W.M. Ramsay in Kaisariyeh zusammen mit Thontafelchen, welche einen Contract in kappadokischer Keilschrift enthalten, auch einen Spinnwirtel aus Terracotta*

²² Saherwala et al. 1993: 128, Figure 29; Schliemann 1881: 671; 1884: 137-138. For marked objects at Troy cf. Renfrew 1972: 411-413. For potmarks cf. Hirschfeld 2008; Zurbach 2003. For historiography of investigations of Trojan signs cf. Zurbach 2003: 113-114.

²³ A rectangular shaped lead balance weight from Troy VIII-IX bears similar sign: Schliemann Collection at Berlin: no. 6563. For identical signs on Roman and Byzantine weights cf. Kisch 1965: 152-154.

²⁴ Cf. Hirschfeld 2008; Zurbach 2003: 120-121.

²⁵ Matz 1928: 259.

²⁶ Anatolian Civilizations 1983: 156, Figure A/146; cf. Balfanz 1995: 134; Völling 2008: 236.

²⁷ Marro 1997: Table 86/2; 90/16. In this respect are worth mentioning frequent repeating signs on Urartian storage pithoi (cf. Bilgi, in: Kürkman 2003: 21-22). For the considered potters' marks (one vertical and three horizontal lines) on Urartian ceramics cf. Avetisyan 1992: 47.

²⁸ Hazzidakis 1963: Plate XXXIII/EFH V.

²⁹ Milano 2004, 1-7; Rahmstorf 2006a: 69, Figure 10/16; Unger 1926: Plate 123c, d. For signs on Aegean balance weights, among them also with horizontal and perpendicular lines, cf. Michailidou 2001b. For Phoenician weights cf. Elayi, Elayi 1997.

³⁰ Cf. a blob of silver from about the 12th century BC found in the palace at Knossos with traces of a mark like 'H' or one vertical and one horizontal lines (Burns 1927: 54, Plate IV, 1).

³¹ Sommerfeld 1994: 213, 222, 239.

³² Cf. Bobokhyan 2008a: 165. For the appearance of such signs also on the so called *Brotlaibidole* from a Middle Bronze Age Flachensiedlung by Radčice, southern Bohemia, cf. Chvojka, Hruby 2007: 80, Figure 9/1-2.

³³ Archi 1987, 48-49, Figure 2.22/23b; cf. Bobokhyan 2014, 339, Figure 4/3-5. Similar signs turn up also on a haematite lion weight from the Middle Bronze Age Palace Q of Ebla (Mazzoni 1980). For another ovoid stone balance weight from the Middle Bronze Age Ebla with six incised lines cf. Lassen 2000: 237; Zaccagnini 1986a: 421.

³⁴ Ascalone and Peyronel 2006: 51.

³⁵ Schliemann 1884: 137.

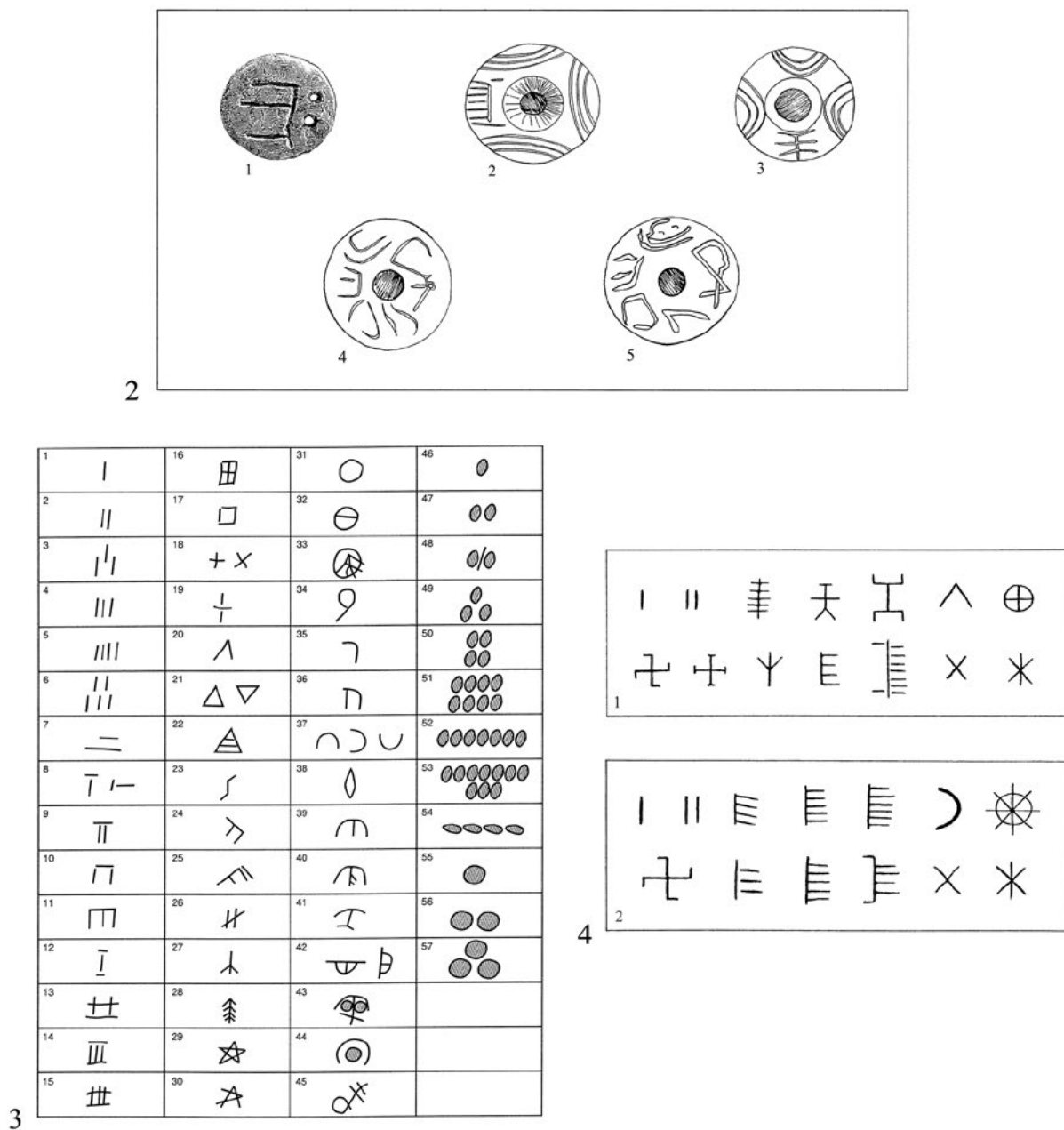


Figure 2. Marks on spindle-whorls from Troy II-V (6-9), without scale: Balfanz 1995: 134-135, Figure 35, 38;

Figure 3. Signs on Early Bronze Age pottery from Hirbet ez-Zeraqōn, without scale: Genz 2002b: 110, Table 76;

Figure 4. Owners' marks on the pottery of Vinča-Culture (1) and on the pottery and spindle-whorls of Troy II (2), without scale: Hood 1961: 216

gekauft hat, der in Material, Gestalt und Verzierung dem in 'Ilios' unter Nr. 1940 abgebildeten trojanischen Spinnwirtel vollkommen ähnlich sieht. Ornamentierte Spinnwirtel ähnlich den trojanischen finden sich auch in Cypern'.³⁶

Besides, in 'Ilios' under the no. 1408, H. Schliemann mentions a round or oval object of terracotta with two holes and the same sign of one vertical and three horizontal lines, which comes from his Sixth settlement (Figure 2/1). He writes: 'Sie hat die Grösse und Form unserer Taschenuhren und zeigt zwei Löcher. Bemerkenswerth ist der Gegenstand wegen des in denselben eingeschnittenen Schriftzeichens oder Symbols, das auf den trojanischen Wirteln so sehr häufig und, merkwürdig genug, auch über den Thüren dreier in der alten Nekropole in der Nähe von Marino unter einer Schicht von Peperin gefundener Hüttenurnen und weiter über der Thür einer ähnlichen im Königl. Museum zu Berlin aufbewahrten Hüttenurne aus derselben Nekropole vorkommt. Auch findet es sich siebenmal auf den von Fräulein Sofie von Torma in ihren Ausgrabungen im Maros- und Csernathal in Siebenbürgen entdeckten Vasenboden'.³⁷ Though H. Schliemann does not interpret the real function of this object, it could be very well a balance weight with two types of signs - dots and lines, which is a well known case among ancient balance weights.³⁸

In the mentioned article of J. Poppelreuter, where the depata were published for the first time, the author brings following interpretation on signs: 'Es ist zu beachten, dass sie in den weichen Thon eingedruckt sind, dass sie also wohl kein Besitzerzeichen, sondern eine vom Töpfer bei der Herstellung gemachte Bezeichnung sein müssen. Der erste Gedanke an eine Art Fabrikmarke tritt zurück, wenn man beobachtet, dass die Zahl der an dem Grundstrich angebrachten vier, fünf oder sechs Querhasten in einem Verhältnis zur Grösse der Gefässe zu stehen scheint, dass es sich also vielleicht um Maasse handelt. Der zerstörte Zustand der beiden Stücke mit fünf und sechs Querhasten, deren Zeichen neben dem mit vier Hasten nicht abgebildet zu werden brauchen, lässt es leider nicht zu, ihren Inhalt festzustellen. Die untere Breite beträgt bei diesen fünf und fünfeinhalb Centimeter, während sie bei dem einzig vollständig erhaltenen, das 150 Kubikcentimeter fasst, viereinhalb Centimeter beträgt'.³⁹ Similar to interpretations of J. Poppelreuter are that of H. Schmidt.⁴⁰

Like the mentioned authors, also J. Zurbach interpreted the signs on depata as 'Maßzeichen', however, according to him, 'Sie bleiben aber durchaus isoliert; dass alle Gefäße

depata amphikypella sind, ändert ebenfalls nicht daran, weil der Anteil dieser eingeritzten Gefäße auch gegenüber den zahllosen anderen Gefäßen dieses Typs sehr klein ist... Die frühbronzezeitlichen Zeichen bilden ein kleines, geschlossenes Maßsystem, das wohl auf drei zusammen hergestellte Gefäße beschränkt geblieben ist'.⁴¹

For K. Balfanz these 'comb-like' signs have symbolic meaning and deal with the images of animals. However, their coming out on spindle-whorls and ceramics indicates also on their possible interpretation as property signs.⁴²

Another explanation gives E. Barber, coming out from the similar image on a Cretan clay seal, on which this Linear A sign can be interpreted as loom.⁴³

The next interpretation belongs to E. Völling who, like K. Balfanz, names these signs 'comb-like' and writes on them: 'Kammförmige Zeichen, die als Töpfermarken aus dem gesamten ägäisch-anatolisch-nordsyrischen Raum gut bekannt sind, treten wie die Svastiken als Einzelmotive in Gruppen oder in Kombination mit anderen Elementen auf'.⁴⁴

Distinctive ideas towards the signs under consideration develops M. Hood in the context of interpretation of tablets found in Tartaria, a settlement of Vinča-Culture in Transylvania, Romania. Though the C14 dating of Vinča-Culture goes back to the 5th-4th millennia BC, however the author sees essential parallels between cultures of Vinča and that of Early Bronze Age Troy, which imply that the Vinča-Culture could not have arisen much before the time of Troy II. For this point speaks also the fact that the three tablets from Tartaria show some connection with early Mesopotamian pictographs. Among the mentioned cultural parallels with Early Bronze Age Troy are also potters' marks - numerous signs the Vinča people scratched on their pots, presumably as owners' marks. There are comparable marks - in many cases identical ones - on Trojan pots and spindle-whorls dating from the period of Troy II and later. During this period similar marks appear in other parts of Asia Minor, scratched or painted on pots. Within the area of Vinča-Culture owners' marks are particularly abundant at Tordos, a site not far from Tartaria; the signs were usually incised on the bottom of a pot or low on the side before firing,

³⁶ Schliemann 1884: 138.

³⁷ Schliemann 1881: 672. Schmidt (1902: 297, no. 8292, 8293) mentions two such objects of terracotta with two holes and one vertical and three horizontal lines, defining them as 'linsenförmig'.

³⁸ Petruso 1992: Plate 4-9. Cf. four impressed dots on a sphendonoid balance weight from Troy (Easton 2002: 282, Figure 184, no. 73/578; Schliemann 1874: 147-2863).

³⁹ Poppelreuter 1895: 211.

⁴⁰ Schmidt 1902: 90, no. 2030, 2031, 2032.

⁴¹ Zurbach 2003: 118-119, 122. Zurbach (2003: 118) speaks out in the same way also about the crescent-shaped sign on the next depas: 'Dass man einen Halbmond auf dem Boden eines Trinkgefäßes eindrücken (eher als einritzen) lässt, und nur einmal, kann leider für uns und für immer den Sinn verloren haben; es kann ein einfaches 'Töpferzeichen' sein, das eine praktische Funktion haben sollte (z.B. für wen war dieses Gefäß oder die Gruppe von Gefäßen, zu der es gehörte, hergestellt), oder ein persönliches Zeichen, wodurch man sich ein besonderes Gefäß aneignen konnte'. For parallels of this sign on Aegean balance weights cf. Petruso 1992: Plate 5/44; 9/165.

⁴² Balfanz 1995: 134-135.

⁴³ Barber 1991: 92; cf. Balfanz 1995: 135.

⁴⁴ Völling 2008: 241.

just like in Troy. Most Tordos pots that carry such marks have only one, but some have two or more. Also the horizontal and vertical signs under the Trojan depata appear under the vessels or as an element of painting at Tordos and among other sites of Vinča-Culture (Figure 4).⁴⁵ Several of the marks used both by Trojan and Vinča potters are, as noted above, identical with that of Syrian-Mesopotamian pictographs and potters' marks. It is not hard to imagine how Trojan owner's marks could have reached the potters of Tordos. But how were the Trojan potters able to borrow the signs from Mesopotamia? Syria seems a probable intermediary. The Syrian-Mesopotamian influences, attested both in Trojan pottery and jewellery reached Troy through Cilicia and then got from Troy to Balkans. In the ground of this relations laid the metal trade in which Troy was intermediary of European metal (especially gold and tin) to the Near East.⁴⁶

Another background for interpretations has been elaborated by H. Genz during investigations of Levantine potmarks. Incised and pressed in marks are well known phenomenon in the Early Bronze Age Levant. The most of them are made before baking, on the rims, shoulders, handles or under the vessels and bear different motives, many of them with parallels in Troy.⁴⁷ A very important site in this connection is Hirbet ez-Zeraqōn, an Early Bronze Age II-III urban settlement in Palestine, where 564 potmarks have been identified, 545 of which are scratched before baking; 93 of them are made under the vessels to be interpreted as 'Inhaltsbezeichnung', i.e. they have functional meaning. On the whole there are 57 different motives, with parallels in the Levant and also in Syria as well as on the pottery and spindle-whorls from Troy: among them are also the horizontal and vertical signs of Trojan depata (Figure 3/24, 25).⁴⁸ The comparison of Hirbet ez-Zeraqōn and Trojan potmarks can be supplemented by other parallels between these two sites, among them decorated bone tubes and seals are especially worth mentioning.⁴⁹

So, the former investigators, comparing the signs with their European and more often with their Near Eastern counterparts, interpreted them as images of concrete objects (chair, door, window, loom, animal), potter's marks, owners' marks or marks for measures of capacity.

New interpretation

Among the mentioned interpretations the idea of marks for measures of capacity seems to be the most logical one, because the quantity of horizontal lines can be good connected with dimensions of vessels and increasing of capacity. If so, one question seems to be puzzling: what kind of connection exists between signs on vessels denoting capacity measure and the same signs on other objects and especially on balance weights as it is in the mentioned case of Troy and Ebla?

This problem can be solved if we go into details of mental world of the Bronze Age man, where sometimes the border between conception of weight and capacity measures is not discernable. To show that the idea of weight and capacity can coincide, let us remember the metrological terms with *PRS*-root designating both weight and capacity (sometimes also length) units together in the languages of some old Semitic peoples. The oldest data come just from the archive of Ebla where it means both weight and capacity units i.e. half of *gubar* (ca. 20 litre) and half of *mina* (470g). These units were used especially for rations of grain.⁵⁰ The same meaning comes out not only by the later Semitic peoples and languages such as Aramaic, Mishnaic Hebrew⁵¹ but also in Anatolia, i.e. by the Hittites - meaning both weight and capacity units together. However, the autonomy of the Hittite system is illustrated by the fact that the value of its own *PRS* appears to be in the neighbourhood of 50 litre and that is not only a dry measure but also a liquid measure and a unit of weight. *PRS*-terms were typical mainly for the eastern Mediterranean lands and less for Mesopotamia.⁵²

If there was original connection between standards of mass and weight of water contained in vessel, i.e. if ancient capacity-standards were based on their water-content weighed to the standards of mass (weight), one would expect the basis to have been wheat instead of water. So, on the ground of the Mesopotamian weight system was barleycorn: a *shekel* = 180 barleycorns. Linkage of weight and capacity to water weight is to trace also in Mesopotamia, what is entirely within the range of the 3rd millennium BC technology and mathematics. So, 1 *sila* of water = ca. 1000g, 1 *mina* = ca. 500g, i.e. 1 *sila* of water = ca. 2 *mina*.⁵³ Also Egyptian

⁴⁵ For that very sign on Vinča pottery cf. Balfanz 1995: 134; Hood 1961: 217; Raczky 1990: 85, Figure 112; Todorovic 1969: 78, Table 10/9. For signs on artefacts of Vinča-Culture cf. also Marangou 2001: 24ff.; Zurbach 2003: 116-118.

⁴⁶ Hood 1961: 215-217.

⁴⁷ Genz 2002b: 109ff., with corresponding literature on different sites.

⁴⁸ Genz 2002b: 109-117, 122-123, for the sign under consideration cf. Figure 76/11, 24, 25; Table 67/12; 106/15; 118/8; 130/12; 157/G.

⁴⁹ Rahmstorf 2006a: 59, 87.

⁵⁰ We have also archaeological evidence towards this question. So, one group of balance weights from the Royal Palace G of Ebla comes from the so-called Southern wing of the Central Complex, which was devoted to store liquids and food (Ascalone and Peyronel 2006: 52).

⁵¹ However, in Akkadian it means only capacity unit and in Phoenician - only weight unit (Wolters 2002).

⁵² Wolters 2002. For the Hittites cf. Van den Huot 1987-1990: 525.

⁵³ Cf. Skinner 1954: 782; Vaiman 1976: 42, 55ff. In this connection it is worth mentioning that the calculation of the Babylonian clepsydra was based on the unit of weight *mina*, determined as the weight of water within the capacity of 2/3 *sila* (Vaiman 1976: 287-288).

⁵⁴ As to archaeological data, cf. by Hrouda (1991: 259-260): 'Ein altbabylonisches Gefäß aus Tell ar-Rimah ist mit seinem Fassungsvermögen

capacity measure *hon* (29.1cu) occurs in subdivisions of the weight unit *qedet*. The multiples of the *hon* were decimal, as in the weight system. The weight of water contained in the *hon* was 50 *qedet* of 147 grains (9.4g), which was the median value between the main standard of the *qedet* of 144 grains (9.3g) and the sub-standard of 151 grains (9.8g).⁵⁴ In Ancient China too existed original connection between different standards, which were all based on red millet seed.⁵⁵

Essential information in this connection derives from Mari, another important northern Syrian site at the beginning of the 2nd millennium BC. Here the wine was sold not according to specified amounts in liquid measures, but by the jar, and the same applied to grain, oil, and honey.⁵⁶ Similar data derive from Ebla, however in the context of oil.⁵⁷ We would like to remind that the depata were surely connected with the wine trade⁵⁸ and northern Syria was also on the way of spreading of depata. However, also the oil could be connected with depata: as we mentioned above, at Ebla, in the room where two weights with identical to Trojan depata signs have been found, also texts concerning the delivery of food rations dealing principally with meals and oil were unearthed.

Drawing parallels between signs on vessels and on balance weights is justified through some other examples from the Bronze Age Aegean and the Near East, showing the connection between weights and vessels.⁵⁹ So, a Minoan limestone sphendonoid balance weight of 8.4g (= Babylonian one *shekel*) from Metaxas Collection, Herakleion, has an image of a handled amphora, like depata from Troy, and three parallel notches as signs. The same amphora as sign is known from another four sided clay balance weight from Zakro (113.55g). This means a certain connection between vessel and balance weight. Investigations of these two pieces show that the signs do not signify the value of

the vessels (e.g. 2.8g as three units for the first one) but the purpose of utilization of both balance weights or as a type of calibration.⁶⁰

Other examples are (goldsmith's) treasures from the end of the 3rd millennium BC found in (sealed) clay vessels consisting of precious metal objects, silver and gold ingots, semi-precious stones and sometimes balance weights, known from Byblos ('Montet jar'),⁶¹ Mari ('Treasure of Ur'),⁶² Tell Brak ('Treasure HS 3'),⁶³ Larsa,⁶⁴ Eskiyapar,⁶⁵ Mahmatlar⁶⁶ and Acemhöyük III.⁶⁷ We should not forget here also the Trojan Treasures A (six silver ingots) found in two-handled silver tankard, Treasure E (gold ingots) found in a terracotta jar⁶⁸ and Treasure F (electron ingots) found in a depas.⁶⁹ These examples prove once more that the depata were really connected with trade and measuring implements and themselves were a measuring implement.

So, for many peoples of the Bronze Age world the coincidence of weight and capacity measures was usual. Among them were also the Eblaites and the Hittites. The juxtaposition of the Trojan marks with that of the balance weights from Ebla proves the existence of similar conceptions also at Troy. However, as was noted above, this formal coincidence can be justified only in case of existence of more global and systematic contacts between these two sites and regions. Let us trace this process through the analyses of abstract (weight systems) and concrete (artefacts) connections.

Weight systems at Troy

According to the data from the old and new excavations, the main time of appearance of balance weights is Troy II-V. The sphendonoids as well as ovoids are the main forms and the haematite as well as different other stones such as granite, basalt, marble, limestone - the main materials used at the site. In the Bronze Age Troy, since Troy II, we can trace parallel existence of at least three weight systems.⁷⁰

The 8.4g Babylonian *shekel* was supposed for Troy first at the end of the 19th century (V. Head, H. Schliemann, A. Sayce),⁷¹ than was repeated by E. Lindsten.⁷² The same system was reconstructed by L. Rahmstorf for the spool-shaped balance weight System II in the Early

gekennzeichnet. So können wir das Grundmaß für die Gerstenration in Mesopotamien, Sutu, auf ungefähr 0.8 Liter veranschlagen. Das steht zwar im Widerspruch zu Angaben, die sich aus Texten mit Rechenaufgaben ergeben, bleibt aber trotzdem der einzige reale Nachweis in dieser Frage'.

⁵⁴ In Egyptian system of weight 10 *qedet* were 1 *deben* (93,3g) and 100 *qedet* were 1 *sep* (933g) (Lassen 1994: 136).

⁵⁵ Powell 1987-1990: 509-510; Skinner 1954: 782-783. For jars used as measures for liquids (oil, beer, wine) and also for grain in ancient Egypt cf. Gardiner 1950: 199. In this respect we should remember also, that the Byzantine pound was based on the late Roman pound, the name of which was *litra*. The original *litra* (327.45g) was equivalent to 12 ounces or 72 *solidi* (Kürkman 2003: 30). Our question is, if there is here any connection between early perception of capacity and weight, while *litra* was a premonetary medium circulated in rods and its name, like the names of the most part of early coins, derives from the names of early weight units (Burns 1927: 18, 196).

⁵⁶ Finet 1974-1977: 122ff.; Potts 1997: 148.

⁵⁷ Cf. Genz 2002b: 117.

⁵⁸ Çaliş-Sazcı 2006: 205-206, 208.

⁵⁹ Cf. in this connection the Egyptian story of Wen-Amon's journey to Lebanon to buy cedarwood: here are mentioned payments made in currency of gold and silver, stored in jars and sacks, and valued by weight (Lassen 2000: 234).

⁶⁰ Grumach 1962; cf. Petruso 1992: 50-51.

⁶¹ Montet 1928; Tufnell, Ward 1966.

⁶² Aruz 2003: 139.

⁶³ Matthews et al. 1994: 182ff.

⁶⁴ Arnaud et al. 1979.

⁶⁵ Özgüç and Temizer 1993.

⁶⁶ Koşay, Akok 1950.

⁶⁷ Özgüç 1995: 513-514.

⁶⁸ Cf. Özgüç 1995: 513.

⁶⁹ Dörpfeld 1902: 333-334.

⁷⁰ In circumstances cf. Bobokhyan 2006; 2008b.

⁷¹ Bobokhyan 2008b: 273, Figure 2.

⁷² Lindsten 1943.

Bronze Age II Aegean and Troy.⁷³ Both prehistorical and mathematical analyses of ours suggest the existence at Troy of a mean unit of ca. 8.7g, which should be seen in the context of the Mesopotamian main unit.⁷⁴

The existence of a system based on a unit of ca. 9.4g at Troy (typical for Egypt and the Levant) was supposed first by W. Petrie,⁷⁵ than by E. Lindsten⁷⁶ as Egyptian *qedet* or *kite*. The same 9.4g unit lied on the ground of the System I of sphendonoid balance weights proposed by K. Petruso⁷⁷ and of the System I of spool shaped balance weights proposed by L. Rahmstorf.⁷⁸

A unit based on ca. 5.0-5.9g was suggested for Troy by L. Breglia⁷⁹ and K. Petruso⁸⁰ for his Trojan System II, with possible Anatolian origin (going back to 11.4g unit), as seen from Tarsus and other Anatolian sites.

The situation got from the analysis of ingots from the treasures of Troy II brings to similar conclusions. On the ground of investigations of main ingots from Troy it is possible to speak on existence of the following view points on units: 9.4g (six silver ingots, Treasure A - K. Petruso; cord with 61 golden rings, Treasure J - A. Bobokhyan), 8.4g (six silver ingots, Treasure A - H. Schliemann, V. Head, A. Sayce, C. Renfrew), 8.7g (six silver ingots, Treasure A - A. Bobokhyan), 5.0-5.9g (six silver ingots, Treasure A; electrum ingots, Treasure F - L. Breglia), ca. 5.2g (electrum ingots, Treasure F - A. Bobokhyan).⁸¹ We are by the ingots, as by the balance weights, around the same three units.

These data were checked by us according to mathematical analysis, resulting positive conclusions.⁸² So, on the ground of old and new excavations, and old and new investigations of balance weights and ingots one can speak on existence of three weighing systems at Bronze Age Troy, based on units of ca. 8.4-8.7g, 9.4g and 5.0-5.5g, first of them being based on sexagesimal, the second one on decimal/sexagesimal and the third one on decimal factor systems. They all were used first in the time of Troy II, may be earlier, and continuously existed through the Bronze Age. The system based on the standard of ca. 5.0-5.5g was possibly local Anatolian, the 8.4-8.7g of Mesopotamian and the 9.4g one of eastern Mediterranean origin. In this context is especially important the 9.4g unit, which is attested first at the second half of the 3rd millennium BC in

the Levant and than in the 2nd millennium BC Egypt.⁸³ Introduction of 9.4g unit into Troy took place through eastern Mediterranean:⁸⁴ via Troy this unit was spread also in the Aegean.⁸⁵

In the Bronze Age world there were 'cosmopolitan' sites like Ebla, Susa, Kanesh, Alalakh. The more cosmopolitan the centre, the more different metrological weight systems were in use. E.g. at such sites as Ebla⁸⁶ and Alalakh⁸⁷ also three weight systems were practiced, at Susa - five.⁸⁸ Other peculiarity of trade centres was also the 'mixed' character of the weighing systems like it was in Dilmun, where the standards were related both to Harrapan and to Mesopotamian systems. The Dilmun system was a metrological hybrid (*mina* of 80 or 100 units).⁸⁹ Another 'hybrid' standard has been documented in Old Assyrian period trade between Anatolia and northern Mesopotamia, with a *mina* of ca. 420g, composed by 50 'Mesopotamian' *shekel* of ca. 8.5g.⁹⁰ A kind of 'hybrid' system could represent the 9.4g unit at Troy having characteristics both for sexagesimal and decimal systems.

The importance of Syria in spreading of balance weight types and systems in Ancient World was underlined first by W. Petrie,⁹¹ who thought that sphendonoid and duck weights had Syrian origin. And this can be true also for Troy, where sphendonoids and bird shaped balance weights appear just in the time when the trade of depata takes place.⁹² Ebla should play an important role in this trade. The first system of weights of the 3rd millennium BC known from an area to the west of Mesopotamia is attested just at Ebla (Mardikh II BI, EBA IVA), with systems based on 7.8g (for trade within Syria, Inner Palestine and Upper Mesopotamia, including Mari and Assur), 11.4-11.7g (for Anatolian relations, where this unit is attested at Tarsus and Mersin) and 9.4g (for relations to Syrian coastal centres, Palestine, Egypt, Anatolia, including Tarsus; this system is attested also in Susa, Cyprus, Indus valley). The last two systems are recognized also for the Early Bronze Age Troy.⁹³ Besides, the shapes and materials of balance weights (sphendonoids, spheres of haematite, basalt, limestone etc.) from Ebla correspond to that of from Troy.⁹⁴

⁷³ Rahmstorf 2003.

⁷⁴ Bobokhyan 2006: 92.

⁷⁵ Petrie 1926.

⁷⁶ Lindsten 1943.

⁷⁷ Petruso 1977; 1978.

⁷⁸ Rahmstorf 2003; 2006a; 2006b.

⁷⁹ Breglia 1958: 160-162.

⁸⁰ Petruso 1977; 1978.

⁸¹ Bobokhyan 2006: 87.

⁸² Bobokhyan 2006: 91ff.

⁸³ Ascalone 2006: 183, Figure 10. The 9.4g unit, though very popular in the 2nd millennium Egypt, however is absent there in the 3rd millennium, and its origin must be looked in Syria, hence its name 'Syrian *shekel*' is historically justified (cf. Rahmstorf 2006b: 16, 21).

⁸⁴ Cf. Petruso 1978: 55-56; Lassen 1994: 136.

⁸⁵ Petruso 1978: 97-98.

⁸⁶ Archi 1987.

⁸⁷ Arnaud 1967.

⁸⁸ Ascalone and Peyronel 1999: 367.

⁸⁹ Roaf 1982; Zaccagnini 1986a.

⁹⁰ Zaccagnini 1999-2001: 46.

⁹¹ Petrie 1926: 6.

⁹² Cf. Bobokhyan 2006: 82-84; 2014.

⁹³ Lindsten (1943) thinks that also the Syrian-Palestinian *necef* of ca. 10.4g was in use at Troy.

⁹⁴ Archi 1987: 51-52, 55, 85; Ascalone and Peyronel 2006: 54-55; Ascalone 2006: 164-165.

It is not an accident, that at the end of the 3rd and beginning of the 2nd millennium BC balance weights referable to the Syrian system are one of the most used class both at Troy and at Susa, Persian Gulf and Indus valley sites.⁹⁵ This all justifies the extraordinary importance of northern Syrian bridge in developments of cultural contacts at the end of the 3rd millennium BC. The fact that during the Early Bronze Age weights from the Aegean and Troy are based on the same metrological systems as in Syria shows that the values of the Anatolians and the Syrians were mutually respected. In this sense, common measuring systems point out on relationship among different cultural entities on the base of similar economic values.⁹⁶

Cultural contacts

The existence of contacts between Troy and Syrian sites is justified also through parallels of concrete objects and phenomena.⁹⁷

So, first of all we should name pottery types, among them Trojan depata with good Syrian counterparts.⁹⁸ The depata were possibly wine vessels and testify the wine trade at the end of the 3rd millennium BC.⁹⁹ They travelled through central and southern Anatolia to Syria demonstrating well organized trade routes.¹⁰⁰ About the Syrian influences at Troy at the second half of the 3rd millennium BC speak the Syrian bottles,¹⁰¹ which were containers of valuable liquids and were spreading from Syria to central and western Anatolia through Cilicia as well as to southern Mesopotamia, across the Euphrates route.¹⁰² Also globular pots in Troy II-V are markers of Syrian influences, including small pots with double barrelled-lug-handles of the same form and, possibly, fabric as at Tell Brak: the same pot form occurs at Tell Chuera in Simple and Metallic Ware.¹⁰³ This can be justified also through scientific analysis of possible Syrian Metallic ware at Troy II-V.¹⁰⁴

Except ceramics, one can bring some other phenomena attesting contacts between two regions. So, introduction of potters' wheel in Troy IIb should be seen in connection with the Near Eastern, in particular Syrian contacts.¹⁰⁵ The use of seals for administrative purposes, cylinder stamps for decoration of pithoi and decorated bone tubes at the second half of the 3rd millennium BC are the next points in the chain of cultural contacts between the Aegean sites, Troy and the Levant and must be considered in connection with introduction of balance weight metrology.¹⁰⁶

Some authors interpret the presence of unworked lapis lazuli found at Ebla in the context of balance weights and connections of the site with the Iranian plateau and beyond.¹⁰⁷ In the same time also at Troy appears lapis lazuli with other eastern precious raw materials,¹⁰⁸ this is also being the time of appearance of balance weights. Just in the context of tin and precious stone trade in eastern direction at the end of the 3rd millennium BC¹⁰⁹ one can explain the appearance of a jade water bird figurine¹¹⁰ as well as of 'pestle' like objects¹¹¹ at Troy, supposed to be possible balance weights.¹¹² The intermediary role of northern Syria in transmission of such prestigious objects to the Aegean and Troy is evident.

Looking for answers to the question, what lied in the ground of these connections, the first answer could be - the metal trade. Weighing systems were in close relations with metallurgical procedures. The period of appearance of balance weights at Troy II, as well as at Poliochni Yellow and at Kastri, was the time of spreading of tin bronzes.¹¹³ All these sites yield sphendonoid and/or spool-shaped balance weights.¹¹⁴ The isotopic analyses suggest that the bronze being used at Kastri, Poliochni, Thermi, Troy and Tell Abraq in the Early Bronze Age was obtained from the same sources, i.e. Afghanistan or Central Asia.¹¹⁵ It could be the so called 'Dilmun-tin' mentioned in Mesopotamian sources and in Ebla on the border of the 3rd and 2nd

⁹⁵ Ascalone and Peyronel 1999: 372.

⁹⁶ Cf. Michailidou 2001: 109.

⁹⁷ For contacts between Troy and northern Syria, in the common context of the Near Eastern relations, cf. Spanos and Strommenger 1993; Tolstikow and Trejster 1996: 234ff. For the newest chronological correlations between Troy as well as Syrian and Aegean sites cf. Rahmstorf 2006a: 52, Figure 1.

⁹⁸ Cf. Makkay 1992: 200. Depata appear in northern Syrian region in the following sites: Gedikli and Karahöyük, Tell Tayinat, Zincirli, Tilbeshar, Titriş, Tell Selenkahiye, Tell Bia (cf. Rahmstorf 2006a: 85). For depata of other sites than Troy cf. in circumstances Spanos 1972; Podzuweit 1979: 151.

⁹⁹ Çalış-Sazcı 2006: 205-206.

¹⁰⁰ Cf. Schachner and Schachner 1995: 313ff.

¹⁰¹ Kühne 1976: 63ff., map 2; Rahmstorf 2006a: 55-57, Figure 5-map.

¹⁰² Schachner and Schachner 1995b: 88ff.

¹⁰³ Kühne 1976, 49ff.; Fielden 1981, 221. Cf. vessels with 'Zwillingsösen' of German terminology as witnesses of Trojan and northern Syrian relations (Spanos and Strommenger 1993: 576; Çalış-Sazcı 2006: 208).

¹⁰⁴ Knacke-Loy *et al.* 1995: 170, 172.

¹⁰⁵ Çalış-Sazcı 2006: 203-204.

¹⁰⁶ Rahmstorf 2003: 296. For decorated bone tubes in circumstances cf. Genz 2002; Rahmstorf 2006a: 58-62, Figure 7-map. For seals and sealings cf. Rahmstorf 2006a: 62-67, Figure 9-map; Zurbach 2003: 122-123. For the Near Eastern and especially Syrian influences on Aegean and Anatolian seals (also that of Troy) cf. Aruz 2003: 248.

¹⁰⁷ The find of 37 kg raw lapis lazuli in the Royal Palace G of Ebla (Pinnock 2006), in the same context with 49 balance weights (Ascalone and Peyronel 2006) attests once more that Ebla was a very important redistributive centre in the Early Bronze Age (cf. also Archi 1987: 51; Ascalone and Peyronel 1999: 371), from where lapis lazuli could be exported as far as to western Anatolia, together with other materials and weight systems.

¹⁰⁸ Korfmann 2001: 358.

¹⁰⁹ Cf. Pernicka *et al.* 2003: 167; Sazcı in Çalış-Sazcı 2003: 71.

¹¹⁰ Sazcı and Korfmann 2000: 95, Figure 4.

¹¹¹ Boroffka and Sava 1998.

¹¹² Bobokhyan 2006: 81-82.

¹¹³ Begemann *et al.* 1992; Rahmstorf 2006a: 81-82; Yalçın 2000: 26-27.

¹¹⁴ Rahmstorf 2003: 297.

¹¹⁵ Weeks 1999.

millennia BC, which is to understand in the sense 'mediation of Dilmun'.¹¹⁶ It is also important, that the investigations of some tin-bronzes from the Aegean sites (Thermi III-V) show similarities with that of from Ebla in technologies of using of tin bronzes, with arsenical bronzes as alternatives.¹¹⁷ Syria was very important transit land on this tin trade route, which was going afterwards down to the Levant and up to Anatolia.¹¹⁸ This trade was realized through land and sea routes, directly and through mediators.¹¹⁹

The land routes are attested in the archives of Ebla, Kanesh, Mari or Ugarit. The presence of Anatolian merchants at these sites is testified both archaeologically and through written documents.¹²⁰ Distribution of western Anatolian Early Bronze Age II-III different wares till Cilicia attests existence of that land route in archaeological terms.¹²¹ The finds from Early Bronze Age III Külliöba suggest that communications between the Cilician Plain (Tarsus) and Troy took place through the inland north-western Anatolia and therefore via Cappadocia, Eskişehir and Konya.¹²² A very important site on that way should be Kültepe in Cappadocia, where at the end of the 3rd millennium BC depata, Syrian bottles, jewellery with Trojan and Syrian-Mesopotamian parallels appear.¹²³ And it is not an accident that the same sign as on Trojan depata is present on one vessel¹²⁴ as well as on a spindle-whorl¹²⁵ from Kültepe Early Bronze III. Other sites like Bos-öyük, where sphendonoid balance weights appear together with depata as at Troy II, could play also an important role on that very route.¹²⁶

Some type of mediators in these relations could be the Mesopotamians who used to establish trade colonies on those routes. So, e.g. the Akkadians had colonies in central Anatolia at the end of the 3rd millennium BC, i.e. before Old Assyrian *karums*, as the story 'King

of the battle' attests, when Sargon of Akkad organizes campaign to Mesopotamian colony Burushkhanda (Acmehöyük?), to defend the rights of Mesopotamian traders.¹²⁷ In the archaeological and historical terms the interference of Akkadian dynasty in the important site Tarsus can be reflected both in Burushkhanda history of Sargon, and in his march to Ebla and the Silver mountains, as well as in Naram-Sin's struggle with Anatolian kings, which suggest the possibility of Mesopotamian action in Cilicia, the Bolkarmaden region and the Acmehöyük district, which were on the routes to Troy.¹²⁸ In this respect is worth mentioning the Akkadian Nasriye stele on which an Anatolian vessel similar to depas (precisely a tankard) is depicted, carried by the leader in the lowest register of the stele - an Akkadian representation of soldiers bringing home booty (Figure 5).¹²⁹ It is not an accident, that traces of Mesopotamian system of weight at Troy are discernable just at the time of Dynasty of Akkad. It means that some artefacts and ideas could get to western Anatolia through central Anatolia. Just in this time there are some archaeological and historical attestations on relations between Troy and central Anatolia from the one side as well as between Troy and Mesopotamia from the other side.¹³⁰

That also the sea routes played an important role for trade relations of Troy demonstrates the geographical disposition of the site on Dardanelles.¹³¹ M. Mellink, trying to explain the mechanisms of Trojan relations to northern Syria at the end of the 3rd millennium BC, supposes that these contacts could take place also via the sea routes to Cilicia, where in sites like Tarsus the Trojan and the Syrian influences met.¹³² The Late Bronze Age shipwrecks of Uluburun and Cape Gelidonya with large number of exchanging artefacts and balance weights of various shapes, materials and systems illustrate a model through which the contacts could be taken place as early as the 3rd millennium BC. Especially noteworthy is in this case that on some copper ingots from Uluburun we see the same or similar signs scratched as on the Trojan depata. Among them are plano-konvex (one vertical and two horizontal lines looking like double T),¹³³ oxhide (one vertical and two horizontal lines)¹³⁴ and oval (one vertical and four

¹¹⁶ Cf. Stech and Pigott 1986: 47. The appearance of 'Dilmun *shekel*' in Ebla and in Mesopotamia had to be explained in the context of these cultural relations (Roaf 1982; Zaccagnini 1986b). For mediatory trade between Anatolia and Dilmun cf. Boehmer 1986: 296.

¹¹⁷ Begemann *et al.* 1992.

¹¹⁸ Potts 1990: 228-231.

¹¹⁹ For routes of possible contacts between Syria, Anatolia and the Aegean cf. Genz 2002: 603; Hood 1961: 213, Figure 3; Korfmann 2001: 356, Figure 383; Rahmstorf 2006a: 82, Figure 18. The Bronze Age route which connected central Anatolia with Troy had to be good and secure (cf. Özgüç and Temizer 1993: 627; Tolstikow and Trejster 1996: 236).

¹²⁰ For Anatolian merchants at Ebla and Ugarit cf. Archi 1987: 50ff. For Mari cf. Gerstenblith 1983: 12. For the routes and wandering craftsmen cf. Canby 1965: 53-54; Schaeffer 1952, 49.

¹²¹ French 1969, Figure 48-56. The 'expansion' of Troy II interests into Cilicia, according to M. Mellink (1993: 504, 506), was a type of colonisation. In the ground of this expansion was the metal trade and also the people from western Anatolia were interested in the metal resources of Bolkarmaden region.

¹²² Efe 2003: 93, 95.

¹²³ Özgüç 1986.

¹²⁴ Matz 1928: 259; cf. Balfanz 1995: 134.

¹²⁵ Schliemann 1884: 138.

¹²⁶ Koerte 1899: 17; Korfmann 1972: 1; 1987: 82; Lindsten 1943: 94.

¹²⁷ Vanstiphout 1998; cf. Hood 1961: 217.

¹²⁸ Mellink 1993: 506. The role of Tarsus for Syrian-Anatolian-Aegean relations was very important also in Hittite times (cf. Eriksson 1991: 94) and later. For Cilician roads as linking knots between Mesopotamia, Syria and Anatolia, and Tarsus as the most important station cf. Erzen 1940: 25-27; 32-33. For 'cosmopolitan character' of Tarsus which 'found a balance' between Anatolia and northern Mesopotamia-Syria cf. Mellink 1993: 503, 506.

¹²⁹ Mellink 1963; cf. Özgüç 1986: 41.

¹³⁰ Cf. Easton 2002: 337-338; Mellink 1963. For Akkadian parallels in treasures of Troy cf. Bass 1966; 1970.

¹³¹ Höckmann 2003; Korfmann 1986.

¹³² Mellink 1993: 504, 506.

¹³³ Yalçın *et al.* 2005: 60, Figure 10; 569, no. 37; 570, no. 38.

¹³⁴ Yalçın *et al.* 2005: 561, no. 3.



Figure 5. Details on the alabaster stele of Nasriye, 2300/2250 BC, without scale (Orthmann 1975, Figure 103)

horizontal lines) ingots.¹³⁵ It is very important that on the board were found different balance weights, among them ones to be reckoned to the system of 9.4g.¹³⁶

Summarizing what was said above, we can see that cultural relations between Syria, Anatolia and the Aegean are demonstrated not so much by the small number of oriental imports, but rather by the adoption of important Near Eastern innovations in those regions at the second half of the 3rd millennium BC.¹³⁷ Among them are e.g. conform sets of dishes, indicating comparable drinking customs; first use of the fast potter's wheel; signs of comparable personal hygiene customs; the use of seals in administration; a developed metallurgical tradition. The Aegean and western Anatolia were closely connected with developments originating in Syria, where urbane culture was blossoming. The need of Syrian cities for raw materials and prestige goods called for extensive trade contacts, which were facilitated by standardized metrological systems in these regions. Regional trade roots merged

into a large eastern Mediterranean network, in which Troy was also integrated.

Discussion

The practice of scratching marks on pottery is first evident at the time of Jemdet Nasr phase in Sumer, ca. 3000 BC, when writing had become comparatively advanced. The Syrians, who had in relations with the Mesopotamians during the Early Bronze Age, borrowed that practice from them. They used to scratch marks on their pottery, apparently so that the owners could identify the pots. The Syrian owners' marks are not true writing, but they may reflect some acquaintance with the art.¹³⁸ We think, that the idea of intentional scratching marks on pottery should arrive to Troy from the Syrian region in the period of manufacture of first wheel-made vessels such as depata and this event had deep cultural and historical background to be understood only in the context of transferring of different other cultural phenomena.

Speaking about pottery marks from the Late Bronze Age Troy, N. Hirschfeld notes correctly, that they are texts in the sense that they were intended to convey specific meaning. We cannot 'read' them and so we must rely on their patterns of occurrence to understand their functions.¹³⁹ This is also the case concerning the signs on Early Bronze Age depata, however with one essential difference, that we have a group of signs which reflect concrete meaning, a case which is very rare also among the corresponding materials of the Near Eastern cultures. So, e.g. we have already mentioned the Early Bronze Age site Hirbet ez-Zeraqōn, where more than 500 potmarks have been identified, which, however, do not allow to reveal such regularities, as the signs on three depata from Troy.

Bringing together the results of this work, and going back to the signs under the three depata, let us analyze them from intrinsic (in themselves) and extrinsic (in comparison) view points. We saw, that similar signs appear on other pottery types, as well as on decorated spindle-whorls, balance weights, sickles from Troy and elsewhere, which concern anyhow with measures and premonetary means of exchange. As to the concrete function of these vessels, so, it is evident, that the quantity of horizontal signs increases (4-5-6 lines) according to increasing of their sizes (12-20-25cm) and capacity (100-500-1000 millilitre) (cf. Figure 6). This is a regularity which proves that the signs really mean certain measure of capacity, with a system based on conception of 10, or may be 50 and 100.

¹³⁵ Yalçın *et al.* 2005: 561, no. 45, 46. For parallels of these signs on other oxhide ingots cf. Lo Schiavo 2006: 363, Figure 2.

¹³⁶ On the boards of both ships dominated sphendonoid and domed balance weights, with different sets of weighing systems, mainly in the vicinity of 9.4g and 8.4g; in details cf. Petruso 1984; Pulak 2000.

¹³⁷ Cf. Rahmstorf 2006a; 2006b.

¹³⁸ Hood 1961: 214; cf. also Hirschfeld 2008: 301.

¹³⁹ Hirschfeld 2008: 302.

Inventory no.	Quantity of Horizontal Lines	Increasing in Height (cm)	Capacity in Millilitre	Capacity Divided into Lines	Values in Case of Decimal System
Sch. 2030	4	12	100	100:4=25	10
Sch. 2031 (Tr. 81)	5	20	500	500:5=100	50
Sch. 2032	6	25	1000	1000:6=150	100

Figure 6. Quantitative and qualitative values of depata Sch. 2030, 2031 (Tr. 81) and 2032 from Schliemann Collection, Berlin and their signs

The problem appears if we consider these data in the context of mutual connection of the signs. Among the depata no. Sch. 2031 (Tr. 81) of 500 millilitre capacity is the most logical case, where every line would mean one unit going back to 100. So, if we take 500 as a main unit, let say conventionally a *mina*, than we should have a system based on a small unit, let say *shekel* based on 10. In that case on other two depata we should have correspondingly one and ten lines, however we have four (Sch. 2030) and six (Sch. 2032) lines, which is paradoxical. However, that this interpretation could be grounded hints also the existence of two other unpublished Trojan depata with one and two lines ('Grundstriche') as signs mentioned at the beginning of this article. This 'paradox' could be explained also if we consider the Trojan signs as imitations of their Syrian counterparts. If so, than we can assume that so far as during imitation process not all of the patterns of the objects to be imitated are taken, hence the imitations can be not seen as absolute reproductions. In every imitation something fails, while other things are more than needed. From this view point it can be clear what has happened with the Trojan signs.

In case of another approach to the question, so if we divide the capacity of depata into the quantity of the lines, we shall get a picture (25-100-150) which is logical for each depas in itself (and also can be seen within a decimal factor) but not on the whole (as a logical system) (Figure 6). More realistic would be if we assume, that the signs can not correspond to each other as an absolute system and each of them should be criteria for other vessels of similar capacity and such vessels should be kept in temples or palaces, like it was in many ancient cultures (see below, also for Ebla). In this connection the already mentioned case of Mari, where the wine was sold not according to specified amounts in liquid measures, but by the jar, can serve as a good example.

Looking for parallels of the mentioned phenomenon at Troy itself, we should remind here a non-accidental connection of depata with other measuring implements - ingots. So, as we saw above, the Treasure A with six silver ingots was found in a depas-like vessel (more precisely in a tankard). Analyzing these ingots,

different authors suggested various units for them (5.0-5.9g - L. Breglia; 9.4g - K. Petruso; 8.4g - H. Schliemann, V. Head, A. Sayce, C. Renfrew; 8.7g - A. Bobokhyan). Also the Trojan Treasure F, with electrum rod-ingots was found in a depas. Our analysis has shown, that the concentration of nearly all of the ingots from Treasure F around 10g, comes to prove the idea that on the ground of these ingots lie a regularity. We proposed that on the electrum rods could be signed the *mina* relation of the existed unit (*shekel*). So, translating the mean quantity of notches (55) and the mean weight (10g) into the system, taking into account the mean value of notches (5.34), one can suppose that the *mina* of electrum rods from Troy had to be divided into 55 parts of ca. 10 *shekel* each. It means that the mean *mina* could be ca. 550g (10x55) and the *shekel* ca. 5 or ca. 10g (as double *shekel*), which makes no great sense in a decimal system. Hence, on the rods is depicted ca. 1/55 of a *mina*. Every notch signifies the main unit i.e. 5.0-5.5g of the system.¹⁴⁰ It is noteworthy, that ca. 55 multiple based on 5 and 10 values exists also among standardized gold metal vessels of Bronze Age Middle Europe and neighbouring regions (interpreted as *τάλαντον*) and possibly is attested at Troy.¹⁴¹ We would like to underline here, that the using of decimal system by the Trojans first was supposed by H. Schliemann¹⁴² and then developed by other authors.¹⁴³

Trying to find systematic parallels outside Troy, we can see similarities with Syrian-Egyptian, Anatolian and Mesopotamian systems, where ratios 10-50-250-500-1000 play an important role independent on that fact if the system is decimal (Syria, Egypt) or sexagesimal (Mesopotamia).¹⁴⁴ So, as we saw above, by the so called

¹⁴⁰ Bobokhyan 2006: 88-90. First was Breglia (1958: 160-162), who, through the mathematical analysis of weights of silver bullion ingots from Treasure A and of five gold ingots from Treasure F, proposed a system for Troy II, the standard of which was between 5.0 and 5.9g. The same situation can be reconstructed also in case of two identical bronze anklets in the Late Bronze Age cemetery of Beşik-Tepe near Troy, the *mina* value of which is supposed to be ca. 500-550g (Lassen 1994).

¹⁴¹ Eiwanger 1989: 461; cf. Michailidou 2001: 101-102.

¹⁴² Schliemann 1874, 21.

¹⁴³ Cf. Bobokhyan 2006: 91ff.

¹⁴⁴ For values of around 500 as playing important role in the measuring systems of the Near East, eastern Mediterranean and the Aegean cf. Lassen 1994, 136.

PRS-terms we deal with 10 litre (half of a *gubar*) and ca. 250g (half of *mina*) by the old Semitic peoples and with 50 litre by the Hittites. The weight of water contained in the Egyptian capacity measure *hon* was 50 *qedet* of 9.4g. In Mesopotamia 1 *silā* of water = ca. 1000g, 1 *mina* = ca. 500g, i.e. 1 *silā* of water = ca. 2 *mina*.

We would like here to stress once more the coincidence of conceptions on capacity and weight. This is the case perhaps because in the mentioned regions all measuring units were used especially for rations of grain, which lies in the ground of both weight and capacity units. It is also very important that in Early Bronze Age Troy we have both the Syrian-Egyptian (9.4g), Mesopotamian (8.4g) and Anatolian (11.4g) weight measures. All of them are around 10g and could be based on a *mina* of ca. 500g. Our question is if the same coincidence is not actual also at Troy, where the same signs as on depata appear also on a round object of terracotta with two holes to be interpreted as balance weight. If so, than especially the Syrian-Egyptian and Anatolian models should find their reflection in Troy, which is also supported by the presence of Eblaite signs on Trojan depata. Like the signs on balance weights from Ebla, also that of on the depata could signify divisions within a decimal system based on 10-50-100-150.¹⁴⁵ Moreover, as we saw above, especially 50, it means division into 50, seems to be very important in Eastern Mediterranean (PRS-terms by old Semitic peoples, Eblaite weights from Palace G), Egypt (capacity measure *hon*), central Anatolia (PRS-terms by the Hittites, Old Assyrian hybrid shekel in Cappadocia) and Troy (Treasure F, depata, Beşik-Tepe anklets). From Troy and sites like that this conception could spread in the Bronze Age Middle Europe (standardized gold metal vessels, to be interpreted as *τάλαντον*).

The appearance of vessels like depata and identical signs denoting common measure units in the regions between Troy and Ebla, as well as the cultural context on the whole, clearly explain connections of Troy with the Syrian sites like Ebla. During the cultural transmission western Anatolian depata appeared in Syria, in the same time decimal way of thinking and weight units of around 10g as well as their signs were adapted by the Trojans. The best attestation of Trojan and Syrian relations in the 3rd millennium BC is the fact of dominance of the Syrian 9.4g decimal system at Troy (as well as in the Aegean sites).¹⁴⁶ Moreover, a unit/*mina* of ca. 500g was a kind of linking element between the cultures of eastern Mediterranean and Anatolia. We think this is also the case in Troy, as attested by the signs on depas Sch. 2031 (Tr. 81). If we suppose that this unit or nearby units (such as Syrian-Palestinian *necef* of ca.

10.4g based on decimal system and supposed for Troy by E. Lindsten) lies not only on the ground of weight but also of volume measures at Troy, than we shall have a good context for systematic cultural relations and exchange of ideas between Ebla and Troy. In its turn, Troy was one of the sites from where the Near Eastern values should be transmitted in northern direction.

The data mentioned above prove the fact of integration of Troy in developments of Anatolian-eastern Mediterranean cultural world at the second half of the 3rd millennium BC. This was one of the most active periods of cultural relations in the Bronze Age.¹⁴⁷ The morphological parallels between metal artefacts, wide-spreading of technological innovations, using of tin bronze, similarity between weighing systems were the most important reflections of a kind 'international spirit' created by the activity of craftsmen or traders who rapidly spread the ideas through sea and land routes.¹⁴⁸ Precious metals were evaluated by weight and it is not a coincidence that jewelry appears in quantity together with balance weights at Troy and other sites just at that very time. Also wine and other liquids should be evaluated according to similar criteria.

This all relations demanded unifications of different value systems. The mid to the end of the 3rd millennium BC, just the time of appearance of depata, is the period of unification of the systems of weights and measures in many Near Eastern, Anatolian and Aegean cultures. This is clear while investigating balance weights, when similar forms and systems spread simultaneously in vast territories of the Ancient World.¹⁴⁹ The process of such unifications is well attested in Mesopotamia of the Third Dynasty of Ur. In a Nippur tablet with an Old Babylonian copy of a Sumerian law attributed to Ur-Nammu, the king tells, that along with weight systems he 'established a copper *bariga* vessel and standardized it as 60 *silā* capacity'.¹⁵⁰ Similar processes should take place also in other regions, among them in Anatolia, which where in constant relations with the Near Eastern centres. The three depata with signs can be considered as attestations of such unification made at the end of the 3rd millennium BC - in the time of active contacts with the Near East and especially northern Syria.

Unfortunately we do not know the contexts of finds of the mentioned three depata. However, it would be very possible to assume that they could be found in megara or similar buildings, which had both administrative and religious significance. Such contexts are perfect for finds of objects connected with weights and measures. We can bring here once more the case of Ebla. This site

¹⁴⁵ This interpretation is possible, like it is the case by the already mentioned Egyptian capacity measure *hon*, the multiples of which were decimal, as by the weight system.

¹⁴⁶ Petruso 1978: 49, Table 2; Rahmstorf 2006b: 23, 32.

¹⁴⁷ Lamberg-Karlowsky 1990.

¹⁴⁸ Laffineur 2002: 239; Pernicka *et al.* 2003: 144: 168-169.

¹⁴⁹ Cf. Rahmstorf 2006b.

¹⁵⁰ Biga 2006: 342.

was both administrative and religious centre, where important festivals took place. It is quite probable that people from foreign regions came to take part in these festivals, exchanging goods just in the temples. The temple was the place where standard fixed weights and standard recipients of capacity were put under divine control: the finds of many balance weights in the temples of Ebla attest it.¹⁵¹ Also the interpretation of the evidence in terms of administrative control can be useful. As we noted above, the Eblaite weights with similar to Trojan depata signs have been found together with ca. 250 administrative texts concerning the delivery of food rations for personnel and members of the royal bureau. In this sense these weights could represent the 'official' weights of the administrative area.

As indirect evidence for clarifying the contexts of Trojan depata we can bring the case of spindle-whorls, which, as noted above, in their ornaments demonstrate parallels with the signs on depata.¹⁵² Already H. Schliemann developed an idea, that the terracotta or glas spindle whorls with the name *audou* known from the Palau or Pelew islands in the Pacific Ocean, were used as a kind of money and have parallels both in their forms and decorations with the Trojan ones. This money, according to the aborigenees, was a present of the spirits. It was perforated and could be gathered on the thread.¹⁵³ This idea of H. Schliemann can be supplemented by new investigations of E. Völling, who, coming out from the fact of homogeneity of forms, weights, dimensions and signs of Trojan spindle-whorls,¹⁵⁴ suggests to consider them as special 'tokens' i.e. notations scratched on clay, in the sense of administrative documents, like the Near Eastern counterparts.¹⁵⁵ Considering the contexts of finds of such objects, in comparison with corresponding complexes of the Near Eastern sites, E. Völling mentions also the Megaron IIA in Troy II of H. Schliemann's excavations and the Pillar House in Troy VI of C. Blegen's excavations.¹⁵⁶ The fact that these two buildings are known also as important complexes for balance weights' finds can support the idea of E. Völling on the objects under consideration. Except the mentioned contexts, whorls are among the artefacts which very often appear in other contexts with balance weights in the Bronze Age Troy. Worth mentioning is in this connection also the disposition of the Treasures A and F with ingots found in depata by public buildings and in their association.¹⁵⁷ A unique context dealing

with Troy IIg we have from excavations of C. Blegen. In particular, in Area F 4-5, in connection with Room 253 a sphendonoid balance weight of haematite,¹⁵⁸ a depas and terracotta whorls have been found in the same context with other precious objects.¹⁵⁹

So, if the depata, as measuring implements, had been found in megara and similar constructions, together with balance weights, tokens and ingots than we would have perfect contexts for considering abstract thinking of the ancient Trojans as a system.

As to the question of dating of the three depata, we have already noted that H. Schmidt ranked them commonly among the finds of Troy II-V. According to later excavators this type is attested in the levels of Troy IIc-IV and perhaps also in V. From what has been said above, we can suppose, that they should be ascribed to Troy II, the time of wide spreading of this vessel type and the period of the most active cultural contacts of the site. In more precise terms, they are very probably synchronous with materials from the Palace G of Ebla (ca. 2400-2300 BC). For such synchronism hints the common context of finds from that palace with concrete and systematic parallels in Troy. Among these parallels are first of all the same marks as on Trojan depata scratched on balance weights from Palace G. The probability of such parallelism is justified not only by the appearance of identical signs but also through the system hidden under these signs and used both for weight and for capacity measures in both sites (ca. 10g *shekel* and ca. 500g *mina*, divided into 50), a case which is attested in historical (written sources, *PRS*-terms) and archaeological (finds of balance weights in the Southern wing of the Palace G devoted to store liquids and food) record. Also other finds (such as raw lapis lazuli in the Palace G) together with similarities of technological nature (tin bronzes, jewellery) show that with the import of materials also transmission of ideas should take place from eastern Mediterranean sites like Ebla to western Anatolian sites like Troy.

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¹⁵¹ Biga 2006.

¹⁵² Cf. Balfanz 1995: 123ff.; Völling 2008: 240: 241.

¹⁵³ Schliemann 1884: 45-46.

¹⁵⁴ Towards the Trojan spindle-whorls and their ornaments cf. Balfanz 1995; Becks and Guzowska 2004; Völling 2008.

¹⁵⁵ Völling 2008: 246-251.

¹⁵⁶ Völling 2008: 250.

¹⁵⁷ For Megaron A cf. Bobokhyan 2008b: 279-281 and for Pillar House cf. Bobokhyan 2009. For whorls in other contexts of balance weights cf. Bobokhyan 2008b: 283-284. For disposition of Treasures A and F in

the contexts of balance weights cf. Bobokhyan 2008b: 285-286.

¹⁵⁸ C. Blegen defines this object as a heavy dark-blue stone with smooth surface. This is the only case, that C. Blegen identifies balance weights in Troy writing as follows: 'Similar stones seem to have been used as weights at Babylon and Ras Shamra' (Blegen et al. 1950: 359, no. 37-515).

¹⁵⁹ Blegen et al. 1950: 359, 368, Figure 363.

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Iconology in the Light of Archaeological Reason

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Abstract: The thrust of the iconological approach was to identify a unifying point of reference behind the formal details of iconography. This can help us approach cultural traditions for which there are no longer any living carriers. 'Archaeological reason' defines the conditions of possibility for reaching behind the gap and suggests ways to re-appropriate the lost experience. In this way we develop a semiotics that can be controlled formally, particularly through distributional and perceptual analysis.

Keywords: culture, iconology, archaeological reason, referentiality, metatext, Erwin Panofsky

Facing broken traditions, as we do in archaeology, opens the vista on data that are not part of the continuity of our own tradition. To bridge the gap between us and the brokenness of such other traditions is the task of what I have called 'archaeological reason.'¹ Such task is, in many ways, similar to what iconology proposes to do. In this article, I will first review the notion of iconology, especially with regard to Panofsky's formulation, and will then address the issue of its relevance for archaeological reason.

Gregory Areshian has systematically pursued the goal of recognizing the deeper meaning of works that hail from precisely such broken traditions,² drawing on all elements from both material culture and the textual record. Without using the terms, he has effectively addressed the concerns with which iconology and archaeological reason seek to deal: thus I trust that the approach I am outlining here may appeal to him, and underscore for him the converging of our shared efforts as we seek to revive, with a properly arguable method, lost modes of human experience. It is thus a special pleasure to participate in this ideal symposium in his honor, having lived together through so many changing historical moments, and having shared for so long in personal and institutional situations. Across continents, whether in the halls of academia or in the roughness of field work, it was always the consonance of intellectual goals that brought us happily together.

Iconology

Four frames of reference

In order to properly gauge the meaning of iconology as a concept, we must view it within the context of 'referentiality,' by which I mean the manner in which any given cultural element is understood as a link to some other such element. More generally, we may say that the essence of logical thinking lies in the ability to

brace elements that are not contiguous with each other. It is this bracing that establishes a reference. And in this regard, we may distinguish four steps of referentiality.

The first step is that of establishing an internal or closed frame of reference, one that derives its validity from the congruence of the data as observed. In a given painting (Figure 1), we can identify shapes and colors within the single unifying frame of the painting itself: a unifying golden background, vertical lines that are surmounted by a pointed arch, well defined shapes with darker colors, and so on. Reference is here made only to traits internal to the painting itself, each element being seen in its relationship to the other contiguous elements. We may call this an *inner- or non-referential formal analysis*. It is a form of grammar where the elements are devoid of explicit associations to the larger world we share.

Such an association is proposed by the next step, when each element is inserted in a larger frame of reference, one that considers the world as it exists outside the elements themselves. In a first approximation, the vertical elements within Figure 1 are understood as columns, the larger shapes as human figures, the slender shapes as flowers, and so on. This is the level that is familiar to every human being. It is, in other words, based on a universal frame of reference, that is not related to any specific cultural context. We may consider it as a lexical level, where correlations are established at the simplest level.

Reference to a given cultural context brings us to the next level, one that is, therefore, culture bound, where the degree of specificity becomes progressively more explicit.³ In the case of our example, we can recognize the representation of a given event (the Annunciation), where the two central figures are identified as Mary and the archangel Gabriel, and the figures on the sides as idealized witnesses that are not part of the event

¹ Buccellati G. 2017.

² Areshian 1992; 2003; 2006a; 2006b.

³ This results in a systems overlay, which is what characterizes the -emic understanding of cultures, Buccellati, G. 2006; Buccellati G. 2017.



Annunciation by Simone Martini

as it took place. We may call this a *referential elemental analysis*: each formal element is related to a single referent (Mary, the angel, etc.). It is a form of lexicon where a two-dimensional association is given of one element with another (including also composite elements like the overall subject matter, in this case the Annunciation). We may associate this with semantics, where ranges of meaning are established for any given single element.

The fourth step links not only single elements belonging to different systems, but complete systems in their entirety. We may call this the level of *referential systemic analysis*. Thus the scene in the Annunciation painting with all its details is now put in correlation with the system of representational mechanisms that are common to the region and period when it was created, and beyond that with the system of values which underlie the whole conception of the work. Thus we learn the name of the painter (Simone Martini), the date

when it was painted (1333), the fact that it was produced to be exposed in a church (the Duomo of Siena), which helps to narrow down the frame of reference in terms of the intended audience. The correlation with the text of the Gospel where the Annunciation is described provides a broader dimension of spirituality, and the correlation with other renderings of the same subject matter underscores an important subtle dimension of the scene: the strong vertical element that separates the two central figures (the angel and Mary). Thus the formal elements that have been noted in the first step, and the lexical and semantic identification that has been proposed in the second and third, are now integrated into a deeper level of meaning, which may be linked to the notion of semiotics.

Panofsky and theory

The four frames of reference will be immediately recognized as matching in part the three 'strata'

described by Erwin Panofsky: pre-iconographic, iconographic, and iconological. If I have rephrased the terms in function of a referential system, and further subdivided Panofsky's second 'stratum,' it is in order to emphasize the theoretical import of the distinctions. This serves not only to give greater conceptual coherence to the system of analysis as a whole, but also to highlight its broader applicability beyond the figurative arts. It can in fact be applied not only to written texts but also to elements of material culture other than artworks.

It is interesting to note, in this regard, how limited is Panofsky's direct interest in the theoretical dimension. This is already apparent from the fact that the very term 'iconology,' or its derivatives, occur remarkably seldom in his work. Other than in the title of one of his major books, it is used only twice in Panofsky 1939 *Studies* (pp. 49, 89), and only once in Panofsky 1955 *Meaning* – except for the Introduction to the latter book (pp. 31-33, 38-40). But in this case it is significant that, while this text is the reprise of the introduction to the 1939 volume (*Studies in Iconology*), which is in turn the reprise of an article published in 1932 ('Zum Problem'), the references to iconology are for the most part found only in the latest version. Here, in addition, we find an explanation of the meaning of the term in its opposition to iconography (Panofsky 1955 *Meaning*, p. 31 f.). The term 'iconology' occurs as well in the preface to the 1962 edition of Panofsky 1939 *Studies* (p. v), where Panofsky argues against a critic who had objected to the 'general validity of the 'iconological' method for the interpretation of Renaissance and Baroque art': but the argument is about details of specific pictures, and not about methodology. The relative profusion of the term in just one item, namely the revised introduction to Panofsky 1955 *Meaning*, points unequivocally, I believe, in two directions.

The first is that Panofsky introduced the term only as an afterthought. In spite of the fact that he chose it for the title of one of his books, and in spite of the fact that it has become inextricably tied to his name, it was not really central to his thinking.

The second betrays a deeper state of affairs: Panofsky's concern for theory is in effect marginal. It is not only that the amount of space devoted to it is extremely limited.⁴ More importantly, the impact on the actual text of his other works is minimal. It appears as though, reflecting on the concerns with which he was approaching and assessing specific works of art, he felt the need to summarize, almost in passing, his own methodology. And even this summary is, in the

final analysis, rather skimpy and not particularly well thought out.

And yet. The disproportionate success of the term and of the very brief methodological summary that Panofsky devotes to it, is indicative of a great weight of the argument as such, greater than Panofsky himself envisaged. This I will delineate briefly, in order to highlight the deeper value of the system seen in its theoretical underpinnings, and in order to assess the significance it has for our concerns.⁵

Panofsky's system

As I mentioned already and as is well known, Panofsky identifies three 'levels' as they are normally called (or 'strata,' as he calls them). They overlap, in ways that I will discuss now, the four frames of reference, and corresponding types of analysis, which I have described above ('Four frames of reference').

The pre-iconographic level is that of formal analysis, which envisages 'pure forms,' so that, *stricto sensu* one should not even reach a level of definition whereby a given form can be identified as 'man' or 'horse.' Panofsky refers back for this to Wölfflin (1915 *Grundbegriffe*) who underscores the need to define shapes and their configurations. Such an analysis is wholly neutral as to referential identifications. This is implied by the term 'pre-iconographic,' which indicates that the forms are seen apart from their potential association with any potential level of signification. At this stage, the forms are seen not as signs for a given signified, but purely in terms of their internal organization. This is therefore the most objective starting point, one that is anchored in the incontrovertible observation of primary data (shapes and such), without any further assumptions as to what they stand for.

By contrast, all subsequent levels of analysis presuppose a reference to the outside world, hence a signified behind the shape that now becomes a sign.

Panofsky defines the next level of analysis as 'iconographic,' and he describes it as relating to a 'secondary or conventional subject matter.' None of these terms is particularly felicitous, just as 'pre-iconographic' is not particularly specific. A 'conventional' meaning links, in everybody's understanding (hence 'conventional'), a certain 'image' ('icon') with a specific aspect of reality. But there are two very distinct types of 'convention.' In one case,

⁴ The famous three levels of analysis are contained in just a few pages of Panofsky 1955: 28-32, plus the chart on p. 40f.

⁵ Attention to Panofsky's work has continued, along with criticism. For an overall assessment of his work I have found of great interest the work by Holly, see especially 1984; 1992; and 1996, especially 1996: 155-162. The 1992 book, available only in Italian, develops more at length some of the issues I discuss in this article, in particular the relationship between theory and what I call 'competence.'

<i>referentiality</i>	non-referential	referential		
<i>Panofsky's three levels</i>	pre-iconographic	iconographic		iconological
		(figurative)	(iconographic proper)	
<i>structure</i>	formal attributes	elemental non culture-bound	elemental culture bound	systemic
<i>~ linguistics</i>	grammar	lexicon	semantics	semiotics

the convention is universal, i.e., it is not conditioned by a specific cultural frame of reference. In the other, instead, the convention is specifically culture bound. Thus I would divide Panofsky's second level in two sub-levels, which may be called 'figurative' and 'iconographic proper.' A figurative level describes the case where forms can be matched with figures that are recognizable on the basis of simple human perception, outside of any cultural convention – such as a sitting woman in Simone Martini's annunciation. (It is at this level that one can recognize a shape as a 'man' or a 'horse,' a step that, as we have seen, caused a problem for Panofsky.) A level that is properly iconographic adds a cultural definition: the sitting woman is Mary listening to a specific message from an angel, thirteen men sitting at a dining table are a depiction of the Last Supper, and so on.

The third level in Panofsky's analysis is that of iconology proper, which he describes alternatively as relating to the intrinsic meaning or content, to the underlying principles, to the 'symbolical' values, to the emotional attitude. Also relevant in this respect is the title of the second major collection of studies, *Meaning in the Visual Arts* (1955). This 'meaning' is the deeper or 'intrinsic meaning' which he considers as the distinctive trait of iconology. In his words, the '*intrinsic meaning or content*, constituting the world of '*symbolical value*' is based on '*synthetic intuition* (familiarity with the *essential tendencies of the human mind*), conditioned by personal psychology and '*Weltanschauung*.' The result is a 'History of *cultural symptoms* or '*symbols*' in general (insight into the manner in which, under varying historical conditions, *essential tendencies of the human mind* were expressed by specific themes and concepts).⁶ These definitions remain somewhat vague, because it is not shown how the notions of 'intrinsic meaning' and 'cultural symptoms' can be implemented methodologically, and are left ultimately to a 'synthetic intuition,' a concept with which Panofsky does not feel fully at ease: 'To grasp these principles we need a mental faculty comparable to that of a diagnostician, a faculty which I cannot describe better than by the

rather discredited term 'synthetic intuition', and which may be better developed in a talented layman than in an erudite scholar.'⁷

We can thus subsume Panofsky's 'strata' under the theoretically more cogent conceptual organization based on the notion of referentiality as indicated in the chart that follows, where we may also see the correlations with categories drawn from linguistics.

Semiotics

Taken literally, semiotics might be seen to overlap with referentiality: when a shape is taken to refer to an entity in the real world, it becomes a sign that points to a signified. In the painting we have been using as an example, a given shape emerges as a sign when it is taken to refer to a woman, who is then more explicitly identified as Mary, who is further understood as being the recipient of a special message. In fact, however, the concept is restricted to just the last level, the one that Panofsky calls iconological and that can be considered to define referentiality as occurring among full systems of signs. The notions of lexicon and semantics are thus useful to distinguish semiotics proper from its non-systemic counterparts.

A *lexical* identification defines a figure in the most immediate and universal terms: a human figure, a human figure with wings (not a given in normal perception, but a conflation of two realities that are given in different contexts), flowers, etc. The referential link is between single elements that correspond to the most elemental human perception as such, not yet invested by the additional layers of meaning that a cultural system imposes on them.

A *semantic* identification presupposes such cultural system, and, while still limited to an individual element, it sees it as endowed by a broad range of significations, which all converge to propose a comprehensive physiognomy of the intended character. Thus in the Annunciation scene, Mary is the referent for the seated

⁶ Panofsky 1955: 40-41.

⁷ Panofsky 1955: 38.

woman: she is 'signified' as such by a number of 'signs': the halo, of course, but then, more specifically, her stance relative to the overall composition of the scene. The halo identifies the other figures as belonging to the supernatural sphere (the angel, the saints). The dove in the upper center signifies the Holy Spirit, whose 'halo' consists of eight seraphims. And so on. The iconographic approach remains two-dimensional in the sense that it establishes a correlation with a single referent, whether a figure or a larger scene.

A properly *semiotic* identification searches for referential links within clusters of systems. In the case of the Annunciation event as portrayed in Simone Martini's painting, the referent is the entire Christian doctrine of the incarnation, which undergirds the composition and its details. Thus, the vertical element that separates the angel and Mary is the sign that points to the virginal conception (a barrier between male and female figures), as is the breath that comes from the dove towards Mary, which is specular, in its diagonal direction, to the strip with the written words of greeting by the angel to Mary; Mary's recoiling attitude refers to her surprise and receptivity, at the same time, when faced with announcement of a virginal conception; and so on. These are broad ranges of signification, and corresponding wide clusters of signs: the overlay of such ranges and clusters is complex and proportionately difficult to argue in all its ramifications. It also requires a great measure of control with regard an immense variety of sources, not only stylistic, but also historical, literary, theological, and more.

It was in this measure of control that Panofsky excelled. He had been putting in practice the principles which were intuitively clear to him, and which, as I suggested, he eventually, if almost casually, brought together in the set of principles for which he is especially remembered. But his forte remained the implementation more than the articulation of these very principles. Time and again, he showed how concretely one could relate, through the *practice* of iconology, to the witness of a given work of art, bringing out in a controlled, and thus arguable, manner its implications, its deeper meaning. It was the practice of humanism seen as the appropriation of values, in their full import – through a reasoned discourse which could elicit a response beyond the mediation of philological analysis.

Competence

There is another aspect that we must consider, one that is not envisaged by Panofsky or, more generally, by scholars dealing with iconology and its implications (but see below, chapter '*Perceptual analysis*'). The system as described, and as I have re-proposed it here from a theoretical point of view, focuses on referentiality

as intrinsic to a given work: it is the elements of that work that display a referential link, at various levels of complexity, with the outside world as it was present to the author of the work itself (Simone Martini in the case of our example). But the question may also be asked as to the degree to which this entire referential system affects those to whom the fruition of the work is offered. Can they internalize the same broad system of values that the work embodies, and respond to it in ways that call for a *living* perception, in the here and now, of that system?

We may first consider the impact that the three types of analysis have on the target of the research, namely on the audience to which the results of the analysis are addressed. There is a proportionately inverted measure of involvement as one moves from formal analysis to iconology. The referential scope of each type of analysis has a clear effect on the degree to which a response can be elicited. A system that has no reference to the outside world (the pre-iconographic level) implies simply a recognition of the validity of the reconstruction of the internal structure as proposed by the scholar: there can be no emotional response to that. Even iconographic analysis may remain at the level of erudition: the two-dimensional referential dimension is so minimal as to be inconsequential with regard to sensitivity. But with iconology, matters are different: the multi-dimensional scope of the referential system does entail the need to develop sensitivity for values. Appreciating the full impact of the notion of the virginal conception on the part of Mary goes beyond the mere acknowledgment of what is perceived as a fact by the painter and his culture: appropriation, here, means responding to values and not only to notions that have a minimum of reference to the real world.

In order to appreciate the scope of the problem we may think of what happens with the study of a so-called 'dead' language. 'Dead' are only the speakers, not the language: for instance, there is no native speaker, today, of Babylonian. But generations of scholars have reconstructed in great detail the many levels through which Babylonian can be understood (grammar, lexicon, semantics, semiotics). Can we then claim a degree of competence analogous to that of a native speaker? For our current concerns it is not a matter of claiming the technical ability to fluently speak Babylonian, one that would allow us to presume that we might be able to readily converse with a native speaker. It is sufficient to consider a degree of competence that shows a sensitivity for the language that is borne out of having internalized the formal rules. One may then, for instance, formulate potential statements of non-occurrence that are suggested by the intuitive appropriation of the rules, statements that may then be verified objectively with recourse to the data.

It is this competence that we see displayed in Panofsky's writings. Upstream of any theoretical formulation, he had absorbed the tenets that informed the initial production of the works he was analyzing, and had correspondingly shaped his deeper understanding of the same and of their broader cultural environment.

Archaeological reason

The concept

The question of competence, just raised, will serve to illustrate the central concern behind the notion of archaeological reason. Simone Martini's work fits within a tradition that is very much alive, the tradition of Italian and of Christian culture. The inner spring that motivated the painter's choices in the past motivates today's choices of many who are carriers of the same culture. Archaeological reason addresses the converse case, the one of a broken tradition, where there are no living carriers of the tradition. Of a broken tradition we have the signs, but not, at least not immediately, the signified to which they respond. Archaeological reason⁸ is therefore the function of human reason that seeks to bridge the gap of brokenness, and to reach for the signified behind the sign, and thus to reactivate the motor that gave rise to experience.

Iconology works in the same direction. Panofsky's effort pertained to a body of data that is in fact within the stream of living cultures, especially the European Renaissance and Baroque. But in effect the effort was that of identifying rich clusters of explicit formal traits (the signs) leading to the inner spring, the 'synthetic intuition,' that corresponded to the signified, and founded it. That is why I have stressed the semiotic dimension (see above '*Semiotics*'). It is in an analogous sense that we can claim to retrieve experience where we have only fossils – in much the same way that a 'dead' language (i.e., a language for which there are no more native speakers) can be reactivated as the living structure that it was, and thus no longer in effect be 'dead.' We can rightly speak of a semiotics of experience: we seek to establish how the carriers of a given broken tradition responded to stimuli that are otherwise hidden to us, cut off as we are from the living awareness of what these stimuli were.

Panofsky's three steps of formal analysis, iconography and iconology, in the revised sense I attributed to them ('*Four frames of reference*' and '*Panofsky's system*'), are the ones that allow us to retrieve the referential world to which the work belonged. Here, I will refer

briefly to two methods that can be used in this research: distributional and perceptual analysis. It may seem unnecessary to produce theoretical scaffolding for a practice that yields already good results – and in effect I will give, in what follows, a few examples drawn from archaeology, which in practice apply the methods I am describing without referring to the theory I am articulating. But these considerations affect each and every effort at proposing a theory as such. The virtue of theory resides in defining with greater clarity the precise parameters within which the practice takes place, and which implicitly are always present in everyone's approach. Just as importantly, theory serves a major heuristic function when working on actual data, by pointing at possible reconfigurations of the data, with an inverse relationship between a deductive and an inductive approach.

It should be noted that this approach sheds a new light on the question of the relationship between form and content. We may say that archaeological reason is faced with only the form, as the concrete embodiment of meaning: form is all that is left in archaeology. But it is also clear that – precisely because content or meaning were, at the moment of creation and of early fruition within the context of a living tradition, inextricably linked with form – precisely for this reason it is possible to construct an argument that traces our way back from one to the other.

Distributional analysis

In linguistics, distributional analysis offers a precise way of defining patterns of co-occurrence. The correlations are formally defined, and on this rests the inference that is drawn from them. Its validity depends in the first place on its own internal logic. Thus, to infer cultic significance for a given object found in an archaeological excavation one should go beyond the mere mental shortcut that reads special relevance in an unusual cluster of attributes. Which suggests a second major factor in assessing the validity of the inference: the size of the sample. If the definition of 'unusual' rests on a very limited assemblage, then the very validity of the qualification is obviously correspondingly limited. And this in turn leads us to appreciate the great significance of a statement of non-occurrence: to say that something does not occur is very different from saying that it could not occur, but is more or less founded depending on the range of potential occurrences.

Areshian provides an excellent example of distributional analysis.⁹ The sequence of three animals (wolf-goat-stag) is seen as a paradigm that occurs in an astonishing variety of contexts (textual, archaeological, iconographic, folkloristic), a paradigm

⁸ I have developed this concept in detail in Buccellati G. 2017. It is interesting to note that Panofsky uses a similar term in describing his efforts: 'the art historian subjects his 'material' to a rational archaeological analysis,' Panofsky 1997: 14.

⁹ Areshian 2000, with a new introduction in Areshian 2006b.

that allows Areshian to propose that the sequence of the three animals 'signifies' the sequence of birth-death-resurrection. He calls this paradigm a 'metatext': the term refers appropriately to the fact that the distribution of elements, seen in their paradigmatic correlation, goes beyond the value of any individual element. Just as, in a linguistic paradigm, the pair of forms 'I read' and 'he reads' may be considered a metatext in the sense that each individual form acquires a special valence by virtue of its univocal correlation to the other; so the sequence of the three animals is a metatext in that each individual animal acquires a special valence by virtue of its univocal correlation to the others. In terms of the argument developed above, we may say that the two-dimensional (iconographic) identification of each single animal acquires a multi-dimensional (iconological) definition because of the recurrent (paradigmatic, metatextual) clustering (distribution) of the single elements. Or again: the linked sequence (wolf-goat-stag) is the metatext of the unlinked sequence wolf, goat, stag.

The existence of distributional patterns first, and, second, its recognition in the record, entails the assumption that there is in fact a structural whole. The very notion of paradigm, or of metatext, implies a structure that overarches the individual elements and gives meaning to their correlation. Thus semiotics, while building on the two-dimensional correlation between a given item as a sign and its signification, goes beyond it and applies as well to clusters of items. These clusters will normally include heterogeneous assemblages, and this may be called 'cultural semiotics' as well argued by Areshian:

'Here appears the advantage of an application of basic principles of cultural semiotics, that allows us to reveal hidden links between archaeological and linguistic evidence. Semiotics would perceive and analyse the data from linguistics, philology, folklore, archaeology, and art history as components of an integral cultural metatext communicating specific messages through a variety of codes.'¹⁰

Archaeological reason builds precisely on such cultural semiotics. To reach behind the brokenness of a tradition means to identify patterned structural wholes, and to seek for the inner spring that motivated them – much as we seek the vanishing point in defining the integrity of perspective in a painting (the classical study of Panofsky 1927 is significant even in this regard). Archaeology lends itself ideally to this task because of the enormous quantity of data that emerge from the ground in an apparent state of disaggregation. And in this task, the digital dimension is essential, in ways that go well beyond the technical aspect of data

processing. Quantitative analysis offers more than philological control over a large mass of data. It allows, in ways unimagined before computers, an immensely higher degree of awareness for structural correlations than mere intuition might otherwise make possible. For instance, the quantity of iconographic motifs in Mesopotamian glyptics will allow, within a properly digital framework, the identification of significant iconological inferences (as articulated early on in Kelly-Buccellati 1977). Analogously, the daunting quantity of ceramics, whether whole vessels or sherds, can yield unsuspected new vistas into the function of assemblages and their actual use in given contexts (a major digital publication that fully implements this analysis for the entire ceramic corpus of Urkesh is in preparation by Marilyn Kelly-Buccellati; it will be available for open access in 2017 within the website urkesh.org).

Perceptual analysis

Areshian's interest in myth as a unifying theme of cultural semiotics is also a case in point. Already in his 1992 article he brought out extensive 'clusters' of linguistic and archaeological elements,¹¹ seeking for 'the deep relation of the revealed mythologema.'¹² This 'deep relation' corresponds to the inner spring behind the data, and the 'revealed mythologema' correspond to the structural wholes that can be described formally, and on which the semiotic interpretation rests. In this case, myth provides the unifying thread, the perception of reality of which the various forms (from material culture to folklore) give expression.

Perceptual analysis may be viewed as a way to achieve a specific type of contextualization, namely one that considers the receptivity context: how would given structural elements have been perceived? In this respect, there are a number of other types of analysis that have broached the same problem, for example with regard to written documents (e.g., the 'Sitz im Leben' approach to biblical texts) or to spoken language (as with pragmatics) – not to mention, of course, iconology. More specifically, in our case, we would want to ask: what clues are there that may allow us to reconstruct such assumed perception?

We will look here briefly at two specific situations where a special approach to perceptual analysis may be proposed: the built environment and movable objects.

The built environment

I have used the concept of perceptual analysis in the practice of excavation as a way to articulate strategies.¹³

¹¹ Areshian 1992: 21.

¹² Areshian 1992: 22.

¹³ Buccellati F. 2010; Buccellati G. 2017.

¹⁰ Areshian 2006b: 283.

The main goal, in that case, is to identify what the ancient perception of the built environment might have been: this will then provide a sense of direction to the excavation process, in such a way that the exposure of remaining architectural volumes may match, as much as possible, the ancient point of view. The question I ask during excavations is: how would a given building, of which we have now only a corner, relate to other partially excavated buildings, and to the open spaces, within the context of the larger urban texture? And how should then the excavation proceed, in order to expose not only the individual buildings, but also their reciprocal connection as would have been viewed, and sensed, by the people on the ground? These principles guide the excavation also in function of how the results may be presented to viewers, in other words, the *conservation* strategy is built into the excavation strategy itself, so as to preserve not only the individual structures, but also the larger coherence of the urban landscape to which they belong.

Three-dimensional visual reconstruction of buildings, and occasionally also of settlements, has been common practice. A study of their diverse styles, and even the occasionally fashionable transfer to modern architectural structures,¹⁴ highlights the significance that this approach has had in the field. Virtual reality has in the meantime become the privileged venue for giving shape to what may have been the ancient visual experience of the built environment: with the possibility of dynamic walk-throughs, of viewpoints rotations, of lighting variations, and so on, the interaction with the model is immeasurably more effective than with standard graphic three-dimensional renderings, whether graphic or plastic. Here I wish to point out only two factors that are pertinent to perceptual analysis: the documentary and the heuristic dimensions that pertain to all these gradations of visual reconstructions.

The documentary value is often obscured by the sheer aesthetic quality of the visual representation. But it does provide means to contribute in an essential way to the quality of the record. When first experimenting with virtual reality, I remember being impressed by a statement of colleagues in the school of architecture who had been creating 3-D reconstructions from floor plans and elevations of buildings as drawn in the past even by renowned architects and architectural historians. Their comment was that more frequently than one would expect, the two (plans and elevations) did not match: in other words, the two planes had been seen as independent entities. An immediate check against the data from which the reconstruction is generated is indispensable, and to the extent that it can be carried out directly in the field, at the very moment

of excavation,¹⁵ it serves as a very powerful documentary tool, especially to the extent that actual data are distinguished graphically from reconstructed ones.

The second important factor that pertains to perceptual analysis in an archaeological context is its heuristic function. The three-dimensional rendering is regularly an expansion of the data: many facets are added, not only in terms of colors and textures, but also in terms of portions of actual volumes. There is a double heuristic function of this approach, made possible by the relative ease with which one can produce these renderings. On the one hand, it helps in evaluating alternative proposal for reconstruction, with a flexibility that encourages one to retain a certain distance from any given interpretation, by keeping the alternatives present at the same time. On the other, it proposes, where a structure is still being excavated and such a rendering is available during excavation, parallel paths through which the excavation strategy can be channeled: each path can be quickly adjusted depending on the progress of the actual work (I described this procedure in the very early stages of what used to be called 'computer applications' to archaeology¹⁶).

In general, we may say that the identification of perception of the spatial relationships within a built environment aims in the same direction as iconology. It infers from a variety of spatial factors an organizing vision that would have coordinated this organization. Not that we need to assume a conscious process of urban planning in every case: but even in the simplest of organic developments there is a sense of how volumes cluster together as new are added to old ones. This approach ties in with the notion of a psychological response to architecture,¹⁷ in that it focuses on the target which the initial structural whole envisaged (see above, '*Semiotics*'). It is also in this direction that other current research points, narrowing the area of perception to specific elements, such as the one dealing with sensory experience of architectural spaces.¹⁸ I may finally refer also to the notion of perceptual geography, which extends the method to the landscape as such, apart from the built environment.¹⁹

Objects

How were given items inserted in the fabric of life? What was, in other words, the perception the ancients had of objects we see today severed not only from the tradition but also from the locale of which they were part? How can archaeological reason propose to heal

¹⁴ Micale 2007; 2008; 2010.

¹⁵ Buccellati F. 2017.

¹⁶ Buccellati 1988.

¹⁷ Buccellati F. 2010; see also the seminal and still relevant 1886 study by Wölfflin.

¹⁸ McMahon 2013; Thomason 2016.

¹⁹ Buccellati 1990: 90f.

the brokenness? I will briefly refer to three examples, where the recognition of perceptual receptivity appears as progressively more hypothetical.

The first is the posture which we may arguably presume the ancients would have had vis-à-vis specific elements of material culture. Let us consider, by way of example, the stela of Hammurapi that displays his so-called code of laws, rendered in beautiful cuneiform writing of which the vast majority of its contemporaries could only appreciate the calligraphic dimension. At the beginning of the epilogue, the text relates Hammurapi's words as follows:

*'Let any man who is a party in a lawsuit
come in front of my image, the king of justice [as depicted on
top of the stela],
and let someone read aloud to him what is written in [the
body of] the stela*

*so that he may listen to my words that carry great weight,
and so that my stela may clarify the terms of his case
and he may as a result see a proper resolution [of his case]
and thus may breathe easily again.*

*May he say 'Hammurapi... is like a real father for his people...,'
and may he pray for me with his whole heart
in front of Marduk my lord and Zarpanitum my lady.'*

It is a heartfelt statement that places the stela in a living context, an ekphrasis not of an object, but of a situation. It gives a whole new life to a 'monument' that, seen today in its museum context, is devoid of the living relationship it was originally intended to have for a concrete audience. We need not be too cynical and dismiss off hand the statement as mere rhetorical propaganda. But if you wish to take that stand, you would have to concede that such a rhetorical reading of the stela would still help us to project a dynamics and to stage a scene, even if seen through the eyes of those who wanted to create a deliberate and non spontaneous setting.

The second example relates to the use of glyptics. In the case of seal impressions, we deal with the actual target for whom the message of the seal was intended. An eloquent case in point is that of the hundreds of seal impression from the palace of Tukish at Urkesh. They were found in the place where they were dropped after the containers they sealed were opened. The people responsible for this operation were undoubtedly cognizant of the figurative representation on the seal, and indirectly of the cuneiform legend that accompanied it: and they were thus receptive to the intended message, however subliminally. The whole issue of portraiture and identity²⁰ is central to this type

of analysis: the visual imagery was richly detailed in Urkesh glyptics, and it is a plausible assumption that this was not just a stylistic trait, but also served the specific function of communicating an understandable substantive content to those who viewed them. The writing could not be read, but its mere presence implicitly validated the nature of the figurative representation. For our current interest, this suggests that it is plausible to postulate an open channel to perception.

The third example is that of the reception of sculptures. What was the target audience, or rather, in the plural, the target audiences for whom these pieces were intended? While mural paintings are tied to their architectural setting, and thus can more readily be linked to the perceptual response they would have evoked within the space they 'inhabited,' sculptures are often found apart from their original context, and without a 'caption' such as we have seen for the stela of Hammurapi. Take for example a plaque with two male figures found in our excavations at Urkesh: found broken in a secondary context, we have no stratigraphic definition of its original context. Its subject has been convincingly identified as a representation of Gilgamesh and Enkidu,²¹ and it can safely be assumed to have been produced in Urkesh for local use. In this case, the question about potential perception of the target audience is thus wholly hypothetical. But even just posing the question is suggestive of potential lines of inquiry. We can assume, for instance, that this audience was familiar with the poem of Gilgamesh, which we know was available in a Hurrian version in later times; that the theme was popular enough to be transferred onto a relief with a figurative rendering of a central scene of the poem; that it may in some ways have appealed to the values embodied in the poem and in this scene in particular. Questions such as these may, if nothing else, have a heuristic function by pointing in the direction of other elements from the excavations that may help in defining further the very nature of the question itself.

Hermeneutics

Archaeological reason is the faculty by which we identify with, and relate to, a form of human experience that is not dialogically present to us. Distributional and perceptual analyses are two methods whereby archaeological reason can operate and effectively bridge the gulf that separates us from a broken tradition. There is an ascending degree of potential risk as one moves from the pre-iconographic level all the way up to iconology. The formal identification of shapes in the first level is clearly more easily arguable and 'objective' than the suggestions of meaning relating, as in the

²⁰ Kelly-Buccellati 2010; 2015.

²¹ Kelly-Buccellati 2006.

example of Simone Martini's Annunciation, to such questions as the virginal conception occurring of Jesus.

Iconology is thus the most complex of the frames of reference within which these methods of analysis take shape. It is the systemic or multi-dimensional extra-referential analysis as it relates to figurative works of art, hence it is limited in scope, but very powerful in that it deals with cultural elements of great depth, elements that incorporate a massive (i.e., highly multidimensional) intuition of meaning and its corresponding formulation.

A critique of archaeological reason is the theory that looks upstream of all of this, at the faculty as such and at the conditions of possibility for its operations. In this regard, we may say that a critique of archaeological reason *coincides*, tout court, with hermeneutics. The apparent difference is that hermeneutics (as it is normally understood) presupposes a living stream of self-awareness, and builds on that, whereas archaeological reason, by definition, implies an interruption of that very same stream. And there is at first blush much to support this distinction.

And yet. It is also true, paradoxical though it may seem, that all traditions are broken, including the living ones that have active carriers aware of their own tradition, 'native speakers,' so to say, of their culture. Even my own personal tradition is, if you will, broken, in the sense that my current awareness of my past is not my past, and may in fact differ from what that past actually was.

From this perspective, archaeological reason emerges as the more objective form of hermeneutics, in that it is based on the assumption that we may identify with a human experience that is not able to actively dialog with us in the here and now, but resonates nevertheless with all the power of a life once lived. There is fluidity in this, a fluidity that poses risks.²² But a fluidity that archaeological reason, starting out as it does from an accepted situation of brokenness, is best equipped to handle. It is also the approach that can best deal with the 'archaeology' of Foucault, by defining the structural elements that supported experience in the broken past, and can support it again today.

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Doctrinal Union or Agreement to Disagree? Armenians and Syrians at the Synod of Manazkert (726 CE)¹

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Abstract: After reviewing the historical context of the Synod of Manazkert, this study offers a new treatment of the Armenian and Syriac sources relating to the convening, conduct, conclusions, and longerterm significance of this conclave, utilizing them to reconstruct a more pristine form of the texts and advance certain novel interpretations. While acknowledging the gathering as the pinnacle of Yovhan Ȫjnec'i's catholicate in uniting all the Armenian clergy behind him in a more profound theologically integrated treatment of the liturgical issues addressed at Duin, as well as embracing the West Syrian Church in an unprecedented display of miaphysite solidarity against the Chalcedonian diophysite creed, and thereby affirming loyalty and allegiance to the Umayyad state in opposition to the Byzantine Empire, it argues for the Syrian contingent's redaction of the Synodal Tome and ten final anathemata in order to defend their Severian perspective. In this way they defend the application of the term 'corruptible' to the incarnation in regard to Christ's assumption of postlapsarian flesh consubstantial with ours which was then transformed into incorruption at the resurrection, while the Armenians confessed that flesh as 'incorruptible' within the ineffable union of humanity and divinity. At the same time, both formulae preserve orthodoxy against the extreme Julianist mono-physitism associated with followers of Yovhannēs Mayraṇanec'i that was condemned at the synod.

Keywords: Diophysite, miaphysite, incorruptibility of Christ's flesh, incarnation, Yovhan Ȫjnec'i, Yovhannēs Mayraṇanec'i.

The catholicate of Yovhan Ȫjnec'i occurred at an important juncture in Armenian history, and the able primate optimized its potential so that, although of relatively brief compass, nevertheless his period of office is of primary significance for the development of the Armenian Church from a number of perspectives. The 7th century had brought a great deal of turmoil for Armenia associated first with the continuation of the Romano-Persian conflict of the preceding, which witnessed Greater Armenia again divided politically and religiously, with the instalment of a Chalcedonian anti-catholicos in the Byzantine sphere. Thereafter, Heraclius had sought to expand his gains of 629 by devising compromise solutions to regain control of the eastern Mediterranean by testing *monoergism* on the Armenians and then *monothelitism* more widely in Syria and Egypt that were now becoming incorporated into the emergent Arab sphere. Ultimately, the policy proved injurious to internal security, causing tension among the clergy and opposition with the Pope, while not garnering significant interest among the miaphysites, who increasingly manned the navies of Islam that threatened the security of the once 'Roman lake'.

Although Armenia was militarily then administratively absorbed within the caliphate (645-54), the later Heraclids took advantage of internecine strife in the civil wars of 656 and 680-92 to attempt to reassert Byzantine hegemony in the region until thwarted

by a crushing defeat at Sebastopolis. Meanwhile, domestically, Armenia manifested its traditional fragmentation among the aristocracy reflected in vacillating loyalties towards the regional powers that had characterized its foreign policy throughout the Roman period. However, the new century witnessed the gradual perception of a grudging stalemate with the establishment of firmer borders reinforced by an intermediate buffer zone in token of mutual recognition. A feature of the contemporary demarcation process was Armenia's growing integration into the structure of Umayyad power by its realignment in the newly created province of *al-Armīniya* under the authority of a centrally appointed official in contrast to its looser, semi-autonomous status.² In time, Armenians became so accustomed to this arrangement that they were to support the dynasty in its struggle with the more powerful 'Abbasids, suffering the consequences of their actions thereafter.

Retrenchment and consolidation also marked the religious life of this era with the reestablishment of Chalcedonian orthodoxy in the Byzantine realm at the Third Council of Constantinople (681), followed by the rejection of various Armenian and other liturgical practices regarded as heretical at the Quinisext Council a decade later.³ Meanwhile, the Armenian Synod of Duin of 719 sought to reaffirm a number of traditional rites as well as defend the acceptability of liturgical art against Paulician strictures that Ȫjnec'i had already

¹ It is with great pleasure that I offer this paper in honor of my friend and colleague Gregory Areshian, wishing him many years of scholarly creativity.

² For a discussion of these developments, see Mardirossian 2004: 270.

³ For details, see van Esbroeck 1992: 92-94.

combated in one of his treatises.⁴ His other treatise targeted the Phantasiasts or extreme followers of Julian of Halicarnassus, who in an Armenian context were associated with the controversial Figure of Yovhannēs Mayravanec’i, whose opposition to the Chalcedonian doctrine of two natures in Christ was so virulent that he even rejected the miaphysite approach of a union ‘out of’ two natures, maintaining instead a throughgoing monophysite view of Christ’s possessing only one nature, i. e. the divine, while arguing that His flesh was more appearance than reality. This ‘high’ view of Christ’s divinity naturally subverted his interpretation of His human existence and vitiated his account of salvation. This movement, which had enjoyed widespread popularity in Armenia, had already been refuted by Ōjneg’i’s teacher T’ēodoros Kit’enawor⁵ and was to Figure prominently in the *anathemata* at Manazkert. Similarly, Ōjneg’i is credited with playing a central role in organizing the compilation of two important collections of documents, one in the theological sphere (Book of Letters),⁶ the other in the area of liturgy and discipline (Book of Canons) that formed the foundation for subsequent developments in those areas.

Scholarly advances over the last several years suggest that a broader reevaluation of the epoch and its implications for Armenian theology is in order.⁷ Within that context, the present study seeks to revisit the circumstances, conduct, and longer-term implications of Ōjneg’i’s last great initiative that served to cement his enduring legacy in both ecclesiastical as well as political history.

Historical and Doctrinal Contextualization of the Synod

While agreeing on the core issues of place, time, participants, and certain aspects of the discussion, the signing of a formula of union and compilation of *anathemata*, the extant Syriac and Armenian sources significantly diverge on many of the synod’s broader concerns like the conclave’s wider context, focus, and future significance. Consequently, it is necessary to compare the two accounts to reconstruct events in more

detail. On the whole, the Syriac narrative presents the affair as much more localized and unfolding in a series of very specific steps, beginning with a Syrian priest from the region of Maypherqat informing Catholicos Yovhan that the monks of the Syrian monastery of Beth ‘Igra in the vicinity of Sasun who traditionally claimed to follow the Armenian faith and had their bishop consecrated by the Armenian catholicos were actually Julianist in Christology. Subsequently, Gabriel, a monk of that community, laid the countercharge that the West Syrian Church adhered to Severus’ view that Christ’s flesh was corruptible.⁸ The result was an exchange of correspondence between the catholicos and the Syrian patriarch Athanasius that led to the decision to hold a joint synod, originally to be held in Arzon, but when that plan was opposed by the *ostikan* of *al-Armiīniya*,⁹ presumably as being outside his jurisdiction, it as determined to assemble at the village of Manazkert on the border between the provinces of Hark’ and Apahunik’.

A review of the doctrinal positions condemned in the *anathemata* indicates, as we shall see, that the points at issue between Julian and Severus did indeed occupy the Fathers of the synod. Yet one wonders whether the disputes between an isolated monastery and its local theological opponents would warrant such an elaborate proceeding involving all the Armenian hierarchy and a high level Syrian delegation to decide their case. After all, this was not the first iteration of this debate in Armenian history, the priest ‘Abdišo having presented similar claims in the run-up to the second synod of Duin in 555 without diverting the conclave’s main pursuit of diophysitism.¹⁰ The Syriac description of the course of the gathering reveals the significance the question of corruption possessed for the Armenian bishops, a point reinforced by Ōjneg’i’s discussion of the subject as it relates to certain Chalcedonian liturgical practices, which had been disseminated in Greater Armenia during the period of Byzantine rule from the period of Maurice on. Moreover, the catholicos’ enthusiasm for convening a synod, which is repeatedly underlined in the Syriac sources, seems to stem from much deeper grounds.¹¹

⁴ See *Matenagirk’ Hayoc’*, vol. 7, 2007: 37–44, and Mardirossian 2004: 270.

⁵ See *Yovhannu Imastasiri Awjneg’woy Matenagrut’iwnk’*, 1833: 147–82, and Cowe 1994: 38–45.

⁶ The collection is important for international relations and the history of the major doctrinal debates. The documents it contains relate to earlier synods regarding dyophysitism (Nestorianism and Chalcedon) and doctrinal exchange with the Syrians. For a critical review, see Schmidt 1993.

⁷ Among others, one might signal the recent reevaluation of social and political developments, for which see Garsoïan 2012, the investigation of Ōjneg’i’s employment of a previous canonical corpus attributed to Yovhannēs Mayravanec’i as the basis for his own collection, for which see Mardirossian 2004, and the review of a number of liturgical works traditionally attributed to Ōjneg’i, for which see Findikyan 2004: 545–621.

⁸ Michael the Syrian, 1901, vol. I: 457, vol. II: 494.

⁹ Michael the Syrian, 1901, vol. I: 458, vol. II: 493. The text refers directly to the commander of the Armenian army, which suggests the *ostikan*, who presumably wished the conclave to take place within his jurisdiction. For the identification of the official as the governor of Syria, perhaps because of the refusal to permit a gathering there, see van Esbroeck, 1994: 33. In contrast, Chabot implausibly identifies the official with Smbat Bagratuni, the Armenian presiding prince, on the grounds of his Chalcedonian confession, which would have remained an impediment regardless of the location. See Michael the Syrian, vol. II: 493, n. 8. Additionally, it appears Smbat died in 725, after which a hiatus in this office ensued until 732, on which, see Papyan 1995: 106.

¹⁰ For documentation, see Polarean 1994: 176–203.

¹¹ Michael the Syrian, 1901, vol. II: 493–95.

In the introduction to his Canon relating to Manazkert Ōjneg'i leaves readers in no doubt concerning the enormous significance he invests in the conclave from a number of perspectives. In addition to the crucial theological and liturgical weight it assumes, he also endows it with great symbolic importance as being the seventh doctrinal synod to have been convened in Armenia, beginning from local gatherings to ratify the acts of the first three ecumenical councils,¹² followed by that of Šahapivan, Duin I of 505, and Duin II mentioned above. This orderly development of Armenian theology he views as having been disrupted in the interim by the intervention of a series of Byzantine emperors from the time of Heraclius, keen on winning Armenian acquiescence to a diophysite Christology. He associates this initiative with Heraclius' summoning of the Armenian hierarchy to a synod at Karin (Theodosiopolis) in 632-33, at which he states catholicos Ezr accepted the Chalcedonian formula together with a series of liturgical modifications and shared communion with the emperor according to the Byzantine rite. He then constructs a numerological parallel to the six orthodox synods by declaring that Ezr had commenced a line of six *catholicos* who retained the Chalcedonian confession up to his own day.¹³ Hence, he viewed himself as constituting the seventh hierarch in order, the one who would reverse that trend by returning to the orthodoxy of Duin II in the conclave he was organizing which would therefore take its rightful place as the seventh synod, thereby culminating the Armenian doctrinal tradition. In that regard it is significant that he invokes the authority of the Holy Spirit both as the agent of his election to the 'throne of St. Gregory', the first Armenian hierarch who had organized the first synod, and as the moving force behind his convocation of the upcoming synod.¹⁴ Its finality in this respect is also clearly visible in the conclusion to the Syriac synodal tome, which ends with the phrase '*that it should be the seal and stamp confirming the faith, that is the union between us and you until the end of the world.*'¹⁵ In similar vein, section §20 of Ōjneg'i's Canon on the synod alludes to '*constructing [such an edifice] that from now until eternity they [i. e. Chalcedonians] will be unable to strive against and topple the record of orthodox confession in Christ,*' while section §45 portrays the Syrians leaving in agreement and glorifying God for ever, as they return to their land. Likewise, the catholicos' original intention of summoning the conclave in Arzon on Syrian territory might imply his expectation that the whole West Syrian hierarchy would attend with their

Armenian counterparts. Certainly, the effect of this joint miaphysite *communiqué* would gain resonance both in the Byzantine sphere as well as in the upper echelons of the Umayyad administration where this would be perceived as a powerful statement of independence from their western co-religionists. Indeed, it appears that the Figure referred to as the son of Abu Hakim in attendance at the gathering is to be understood as a representative of that administration.¹⁶

The degree of rhetoric required to erect this symbolic superstructure emerges from a closer examination of the facts alluded to. The numerological finality of accepting three ecumenical councils provides the basis for their Armenian counterparts.¹⁷ However, there was no representative from Greater Armenia at the Council of Constantinople in 381, and the chief bishop Nersēs had passed away a few years previously, although the later Armenian tradition of his presence there may predate Ōjneg'i.¹⁸ It is also debatable whether a synod was held at Aštisat to review the theological situation after the Ephesine Council (431).¹⁹ In contrast, the catholicos omits mention of a series of actual synods held at Duin after 555 that might have been included in his enumeration, e.g. that of 609/10 finalizing the anathema on catholicos Kiwrion and the Georgian Church for their adhesion to a Chalcedonian confession, and that of 648 which again rejected the Chalcedonian formula and generated a detailed dossier expounding the creedal differences between the Byzantine and Armenian Churches in which Chalcedon was again anathematized.²⁰ Similarly, it appears that Ōjneg'i's invective against catholicos Ezr and his successors may partly rest on Mayragomec'i's combative approach²¹. Thus, the repeated reference to Ezr's receiving his hierarchical authority at Karin is incorrect, as his consecration dates from 630. Meanwhile, the reference to his having subscribed to a Chalcedonian creed there is inaccurate as Heraclius' conciliatory policy recognized the impediment posed by a stridently diophysite formula and hence he sought to reunite miaphysite clergy by the doctrine of *monoenergism*, confessing one energy or active force in Christ, a position which the Armenian Church accepts (as a

¹² The first relates to the Council of Nicaea (325) at which Greater Armenia was represented by St. Gregory's son, Aristakēs. Reference to the second duplicates this for the Council of Constantinople (381).

¹³ These are Nersēs Šinoł Tayec'i (641-61), Anastas Akořeci (661-67), Israyēl Ot'msec'i (667-77), Sahak C'orap'orec'i (667-703), and Elia Arčīsec'i (703-17).

¹⁴ *Matenagirk' Hayoc'*, vol. 7, 2007: 122.

¹⁵ Michael the Syrian, vol. II, 1901: 499.

¹⁶ Michael the Syrian, vol. II, 1901: 498.

¹⁷ For the symbolism of the numerals 3 and 7, see Job [LXX] 42:13 in Cox 2006: 206.

¹⁸ St. Nersēs the chief bishop had already died in 373. For the tradition of the latter's participation in the council inserted in an Armenian redaction of the life of St. Cyril of Jerusalem, see Cowe 2003-4: 85-86.

¹⁹ See van Esbroeck 1994: 35.

²⁰ *Mxit'areanc'* 1874: 82-84, 86-88.

²¹ Garitte 1952: 43. Though in this, as in the compilation of canons, Ōjneg'i relied on Mayravanec'i's precedent, van Esbroeck's perspective on his rehabilitation of the latter and ascription of his treatise on the Phantasiasts to his mentor T'ēodoros Křt'enawor seems precipitate in view of his condemnation of Mayravanec'i's Christology in the synod together with his rigorist observance of the fast on the Saturdays and Sundays of Lent. See van Esbroeck 1994: 37, and Mardirossian 2004: 280 on Ōjneg'i's anti-Mayravanec'i activities.

corollary of its one-nature position). In this way Ōjñec'i facilitated the development of the received tradition already full-blown in Yovhannēs Drasxanakertc'i of Ezr's 'deception' by Heraclius and acceptance of a diophysite confession.²²

Typical of the oeuvre of prolific medieval writers in general is the debate over the authenticity of certain works attributed to Ōjñec'i. The issue is complicated by the view elaborated by Armenian Catholic authors, one distinguished both from the account of mainstream Catholic theologians and that of the Armenian Apostolic Church, to the effect that Armenian Christianity had adopted the Chalcedonian creed at an early date and maintained it into the Middle Ages.²³ Consequently, while the other Catholic and Apostolic interlocutors in the debate acknowledged Ōjñec'i's role as pivotal in rejecting the council, Armenian Catholic exponents sought to demonstrate he was a diophysite sympathizer. This approach already informed the scholarship of Mik'ayēl Č'amč'ean²⁴ and was advanced by subsequent spokesmen like Nersēs Akinean who ascribed to Ōjñec'i authorship of an openly diophysite *opusculum*.²⁵ This, in turn, has cast doubt on the authenticity of the main Armenian source on the Synod of Manazkert, the writing traditionally titled *Saks žolovoc' or elen i Hayk'* (On the Synods that Have Taken Place in Armenia) and transmitted in the Book of Letters.²⁶ However, Polarean observed that a lacuna in the text can now be supplemented by appeal to manuscript J858, which also affords a more accurate early form of the superscription by which the piece probably entered into circulation: Կանոն սուրբ հայրապետին տիեզերալուր Հայոց Մեծաց Յօհաննու Օձնեցոյն և այլ սուրբ հարանցն Հայոց և Ասորոց (Canon of the Holy World-Renowned Patriarch of Greater Armenia Yovhannēs Ōjñec'i and the Other Holy Fathers of the Armenians and Syrians).²⁷ The originality of the term *kanon* is supported by a number of internal references (e. g. §50 այս կանոն և զիր 'this canon and writing', §77 զայս գրեցաք կանոնս 'we wrote this canon', and §94 սհաւասիկ ես Յովհաննէս Հայոց կաթողիկոս գրեցի իմով ձեռամբս զայս կանոնս ('See, I Yovhannēs, Catholicos of Armenia, wrote this canon with my own hand'). Of course in its current form, as typically, the title reveals the impact of later scribal embellishments as in the addition of the honorific epithet *tiezeralur* (world

renowned) first attested in Narekac'i.²⁸ Below I present collations of the most salient portions of the work for our purposes on the basis of the two current editions and the most recent reprint followed by an English translation.²⁹

14 Արդ՝ զկնի Տեառն Եղիայի, ի տուչութենէ ամենախնամ շնորհաց սուրբ³⁰ Հոգւոյն, պարգևեալ³¹ ընձեռեցաւ աթոռ հայրապետութեան Սրբոյն³² Գրիգորի, ինձ Յովհաննիսի ներգնեալ տարապատկան փանաքէի³³, մեղաւոր և անարժան ծառայի Քրիստոսի Աստուծոյ, և ձեռնտու եղև ինձ շնորհք կամաց բարձրելոյն, ոչ ըստ իմոյ անարժան տկարութեանս, ըստ դուգնաքեայ մեղսամակարդութեանս³⁴, ի յաստեաց³⁵ ախտից³⁶ երիկեան³⁷ վայրահայեաց բնութեանս, այլ ըստ իւր ամենակարող զարութեանս³⁸, առաջնորդ եղև³⁹ մեզ ամենատէրն մեր Քրիստոս, ըստ շնորհի սուրբ կամաց իւրոց, և գայր հասանէր մեզ ի թիկունս հանդերձ Հարբ⁴⁰ և⁴¹ Հոգւով⁴² սրբով, առ ի զարացուցանել⁴³ զմեզ առնել սինհոդոս հաւատոյ, ճշմարիտ ուղղափառութեամբ⁴⁴ խոստովանել մեզ զսուրբ աւանդ միացեալ բնութեան Բանին Աստուծոյ, միութիւն խոստովանելով, և ոչ երկու բնութիւնս⁴⁵, լինել մեզ վրէժխնդիր առաջնոցն, որ նախ քան զմեզ հաստատեալ էին ի սուրբ հաւատ միութեան անապականաբար, ի ձեռն Տեառն Ներսէսի, որ ի Դուին հաւաքեալք ընդ ձեռամբ նորա, և ջատագով լինել իմոյ անարժանութեանս, առ ի խնդրել զվրէժ պարտուց հատուցման երկաբնակ խոստովանութեանն Եզրի, որ քաղկեդոնական ախտին զմայլեալ կործանեցաւ յուղղափառ հաւատոյ սուրբ ժողովոյն Դունի. և վասն աթոռնկալ տէրութեան իւրոյ հրապուրեաց զբազումս զկնի իւր: 15 Եւ առ զաթոռ տէրութեան իւրոյ ի ժողովոյն Կարնոյ, ի թագաւորէն Հերակղէ, որ տիրելով թագաւորեաց Հայոց և Հռոմոց. վասն զի սպան զԽոսրով արքայն Պարսից և երարձ զթագաւորութիւն նորա, քանզի ցայն վայր հնազանդեալ էին Հայք ընդ ձեռամբ Խոսրովու արքային Պարսից:

²² See Garsoïan 2012: 82-85.

²³ Cowe 2013: 350-52.

²⁴ This proclivity underlies the attribution of Ōjñec'i's Canon with its five liturgical provisions to a certain 'schismatic' Yovhannēs vardapet Manazkertac'i who summoned a 'first' synod of Manazkert in the year 651, on which, see Č'amč'ean, 1784, vol. 2: 351-54.

²⁵ Akinean 1911.

²⁶ See *Girk' T'lt'oc'* 1901: 220-33, and Polarean 1994: 473-93. For a discussion of the work's subject matter and style, see Ōrmanean 1912: 842.

²⁷ Polarean 1968: 350-55.

²⁸ *Nor Baigirk'*, vol. 2, 1837: 874.

²⁹ *Girk' T'lt'oc'* 1901: 222ff. and Polarean 1994: 476ff.

³⁰ u. ed prim.

³¹ om ed prim.

³² u. ed prim.

³³ փանաքի ed prim.

³⁴ մեղսամակարդութեան ed prim.

³⁵ յաստից ed prim.

³⁶ om ed prim.

³⁷ երիկեան ed prim.

³⁸ զօրութեան ed prim.

³⁹ om ed prim.

⁴⁰ սուրբ ed prim.

⁴¹ om ed prim.

⁴² Հոգւով ed prim.

⁴³ զօրացուցանել ed prim.

⁴⁴ ուղղափառութեան ed prim.

⁴⁵ բնութիւն ed prim.

14 Now after the Lord Elia⁴⁶ from the bestowal of the all-caring grace of the Holy Spirit, the throne of the patriarchate of St. Gregory⁴⁷ was bestowed and transmitted to me Yovhannēs, a weak, useless wretch, the sinful and unworthy servant of Christ God, and the grace of the will of the Most High came to my aid not according to my unworthy infirmity, according to my pettiness inured in sin in a nature [now] with a downward gaze from past vices [committed] in this world, but, according to His omnipotent power, Christ, our Lord of All, became my guide according to the grace of His holy will, and came to our support together with the Father and the Holy Spirit to strengthen us to hold a synod regarding the faith for us to confess with true orthodoxy the holy tradition of the united nature of the Word of God, confessing a union and not two natures, [and] for us to rehabilitate our predecessors who were confirmed in the holy faith of a union [effected] incorruptibly through the aegis of the Lord Nersēs⁴⁸ before us, who assembled in Duin under his authority,⁴⁹ and for my unworthiness to become an advocate to seek restitution for Ezr's diophysite confession,⁵⁰ who was beguiled by the vice of Chalcedon and uprooted from the orthodox faith of the holy synod of Duin and through the authority of his office attracted many to follow him. 15 He acquired the throne of his authority at the synod of Karin⁵¹ from the emperor Heraclius, who gained control of and reigned over both the Armenians and Romans, because he killed Xosrov, king of Persia, and brought his rule to an end, since until that juncture the Armenians had been vassals under the suzerainty of Xosrov,⁵² king of Persia.

The Conduct of the Synod and Issues Discussed

According to Michael the Syrian's account, the Syrian patriarch selected six bishops and sent them to the Armenian catholicos, who then assembled his own bishops and summoned the monk Gabriel to appear, who had brought the charge of corruption against the West Syrian Church. Soon the latter emerged as a Julianist and, when he refused to anathematize the heresiarch, was defrocked and expelled.

Michael records the full list of thirty-one Armenian participants in attendance, which have been analyzed by Adontz, Markwart, and Hewsen in documenting the church's administrative development,⁵³ while Ōjnec'i contents himself with citing the first seven in full, largely from the neighboring regions, followed by general references to the other bishops, *vardapets*, and

priests present. Typically, as the names and toponyms were largely unfamiliar to Syrian scribes, the text has undergone a large degree of corruption. Similarly, both lists of the six Syrian attendees have suffered in transmission, however, comparison permits a partial reconstruction. Both sources adduce the first as Constantine, whom the Syriac identifies as from the see of Edessa, In Armenian the designation of Constantine's see has fallen out, but Edessa is assigned to Basil, who appears in second place. In fourth place in Armenian is the Figure T'ēodos of Gardman, which is clearly erroneous as the see is located in Caucasian Albania.⁵⁴ The Syriac, in contrast, reads *T'wdwr' d-Grmnyqy'*, i.e. Theodore of Germanikeia (Maraš), a form so graphically similar that the original text can be reconstituted. However, there is complete incompatibility regarding the final hierarch, whom the Armenian notes as T'ēodoros of Amasia,⁵⁵ while the Syriac records a Simeon of Dara.

It is significant that while Michael the Syrian highlights the prior arrival of the Syrian contingent, after which the Armenians were assembled, Ōjnec'i's parallel account grants priority to the convergence of the Armenian forces, going out of his way to emphasize that the plenitude of the Armenian episcopacy was involved in the enterprise, thereby representing the whole people of the land. Moreover, he stresses the leadership there of his close associate Grigoris Aršaruni, the recipient of the work, who is commended to undertake a special assignment in the final section, and is here by accorded a series of honorifics indicative of the high regard in which the hierarch held him. In contrast, reference to the Syrians is both summary and secondary without reference to the specifics of the mutual charges of heresy, the epistolary exchange between the leaders, and their common decision to hold a synod, a process Michael describes as God inspiring 'the heart of the patriarch Athanasius and of Catholicos Iwnnis to assemble a synod.'⁵⁶ Instead, rather than depicting them as dialogue partners with a distinct doctrinal and liturgical tradition who would engage in debate to clarify their mutual theological understanding, Ōjnec'i celebrates their presence as augmenting the harmonious diapason of voices raised in one united confession. This is powerfully expressed in the rhetorical *figura etymologica* he employs to convey the thought:

'They [sc. the Syrians] had all journeyed [to hold] a joint (միաբանեալ) synod with us . . . Uniting (միաբանեալք) together (ընդ միմեանս) in faith and confessing that union

⁴⁶ Catholicos Elia Arč'išec'i (703-17).

⁴⁷ On the development of the parallel traditions of the thrones of St. Gregory and St. Thaddeus, see Cowe 1992: 143-44.

⁴⁸ The reference is to catholicos Nersēs II Bagrewandec'i (548-57).

⁴⁹ Second Synod of Duin of 555

⁵⁰ The reference is to his signing a monoergistic creed presented by the emperor Heraclius.

⁵¹ The reference is to the Council of Theodosiopolis Heraclius called in 632-33.

⁵² Khusrau II Parvēz, king of Persia (r. 590-628).

⁵³ Hewsen 1997: 117-24.

⁵⁴ Hewsen 1997: 137.

⁵⁵ For the suggestion of emending the see to Emesa, see van Esbroeck 1994: 45, n. 60.

⁵⁶ Michael the Syrian, 1901, vol. I: 458, vol. II: 493.

(գմիութիւն), *we structured many discourses against the diophysites of Chalcedon...*⁵⁷

Granted what we have said above, it is not surprising that Ծյնեցի does not discuss the issue of Julianism Gabriel raised, despite the fact that this was such a pressing current problem in Greater Armenia that, as noted earlier, he had penned a treatise against the heresy himself, and we know from other sources that this continuing movement had produced an updated edition of the *Seal of Faith* associated with the circle of Yovhannēs Mayravanec'i that included long citations from the latter's works introduced by language suggesting the strong devotion they exhibited towards him.⁵⁸ In contrast, Ծյնեցի highlights the attention Chalcedon occupied at the conclave, in keeping with his emphasis in the introduction, and marks the range of speakers who joined in its condemnation.

18 Արդ՝ շնորհիւ կամաց բարձրելոյն և անմենաջողակ սիրոյ Հոգւոյն սրբոյ շնորհեցաւ ինձ Յովհաննէսի կաթողիկոսի առնել Է-րորդ⁵⁹ ժողով ի Սանազկերտ գեաւոյ ի սահմանագլուխ վիճակին Հարքայ՝ բազմաւրեայ ժամանակաւ միատեղայք համաժողովք: 19 Այս եղև իՃՀԵ թուականիս⁶⁰ Հայոց. յէ Տրէ ամսոյ, որոյ ժողովեալ ի մի վայր յԱպահունեաց գաւառ ի գեղն Սանազկերտ, ամենայն եպիսկոպոսաց համաբնակ խոստովանութեամբ աշխարհիս Հայոց, և առաջնորդութեամբ քաջին⁶¹ և իմաստասիրի առն փիլիսոփայի Գրիգորիսի Արշարունեաց քորեպիսկոպոսի, ժողովեալ Քրիստոսասէր տեարք եպիսկոպոսք, որք են այսոքիկ. Աղբէս⁶² Հարքայ, Թաղէս <Ոստանի>⁶³, Սահակ Մամիկոնենից⁶⁴, Յեսու Բասենոյ, Սարգիս Տայոց, Թէոդորոս Բզնունեաց, *Գրիգորէս քորեպիսկոպոս Արշարունեաց⁶⁵, հանդերձ ամենայն եպիսկոպոսաւք Հայոց, քահանայք և սարկաւագունք, և ուխտի մանկունք *սուրբ եկեղեցւոյ⁶⁶, որք աւգնականութեամբ⁶⁷ *Հոգւոյն սրբոյ⁶⁸, ի մի վայր գումարեալք, հաստատելով զհաւատս ուղղութեան տնարինական⁶⁹ Բանին Աստուծոյ:

⁵⁷ *Matenagirk' Hayoc'*, vol. 7, 2007: 124.

⁵⁸ *Knik' hawatoy*, 1914: 253, 281, 288, 327, 363.

⁵⁹ Է. րորդ ed sec.: Է. րորդ ed tert.

⁶⁰ թուականի ed princ.

⁶¹ քաջի ed princ.

⁶² Արփէս ed princ.

⁶³ Ոստան edd.

⁶⁴ Մամիկոնեան ed princ.

⁶⁵ om ed princ.: homeoetel.

⁶⁶ om ed princ.

⁶⁷ օգնութեամբ ed princ.

⁶⁸ Ս. Հոգւոյն ed princ.

⁶⁹ տնարինական ed princ.

20 Եկին ընդ մեզ դարձեալ⁷⁰ արք ոմանք⁷¹ եպիսկոպոսք Զ ի⁷² Յակոբիկ տանէ, վասն միաբանութեան խոստովանութեան ընդ մեզ լինելոյ, որոց անուանքն⁷³ *են այսոքիկ⁷⁴. Առաջին⁷⁵ Կոստանդին <>⁷⁶ եպիսկոպոս⁷⁷, Երկրորդն⁷⁸ Բասիլ⁷⁹ մետրապոլիտ⁸⁰ Ուռհայ քաղաքի, Երրորդն⁸¹ Շմաւոն⁸² Խառանու⁸³ եպիսկոպոս, չորրորդն⁸⁴ Թէոդ<որ>ոս⁸⁵ Գերմանիկէի⁸⁶ եպիսկոպոս, հինգերորդն⁸⁷ Տէր Աթանաս⁸⁸ Նփրկերտոյ եպիսկոպոս, վեցերորդն⁸⁹ Թէոդորոս Ամասիոյ⁹⁰ եպիսկոպոս: 21 Սոքա ամենեքին⁹¹ հրամանաւ արքեպիսկոպոսին Անտիոքայ *եկաւորեալ եղեն⁹² առ մեզ ի միաբանեալ ժողովն, և միաբանեալք ընդ միմեանս հաւատով գմիութիւն խոստովանելով, կարգեցաք ճառս բազումս հակառակ երկաբնակացն Քաղկեդոնի, և խլեցաք զորոմն ապականութեան, որ սփռեալ էր յԵզրայ ցայս վայր տարածեալ, վասն որոյ բազումք կործանեցան յերկաբնակ հաւատն, և մերժեցաք զախտ ժողովոյն Քաղկեդոնի, և որք անկեալն էին ընդ խոստովանութեամբ նոցա, զայնս ևս յուղղութիւն ածելով, շինելով⁹³ յայսմեհտէ և յաւիտեանս ժամանակաց, զի այլ մի ևս կարասցեն հակառակել խախտել զուղղութեան զիր խոստովանութեանն որ ի Քրիստոս:

18 Now, by the grace of the will of the Most High and the all-propitious love of the Holy Spirit it was granted to me, Yovhannēs catholicos, to hold the seventh synod in the village of Manazkert⁹⁴ at the of the border of the region of Hark' assembling in one place for a period of several days. 19 This occurred in the year 175 of the Armenian calendar on the seventh of the month of Trē⁹⁵ on which all the bishops with the united confession of the land of Armenia assembled together

⁷⁰ և ed princ.

⁷¹ + դարձեալ ed princ.

⁷² յԱսորոց ed princ.

⁷³ անուանք ed princ.

⁷⁴ om ed princ.

⁷⁵ առաջնոյն ed princ.

⁷⁶ om edd.: the name of this bishop's see has fallen out cf. textum syr. apud Mich. Sir.

⁷⁷ եպիսկ. ed princ.

⁷⁸ Է. ed princ.

⁷⁹ om edd princ.

⁸⁰ մետրոպոլիտ ed princ.

⁸¹ Գ. ed princ.

⁸² Սիմէոն ed princ.

⁸³ Խառանայ ed princ.

⁸⁴ Դ. ed princ.

⁸⁵ Դէոդոս ed princ.: Թէոդոս ed sec.: The Syriac reads T'wdwr', i.e. Թէոդորոս.

⁸⁶ Գարմանից edd.: The Syriac reads d-Grmnyqy', i.e. Գերմանիկէի.

⁸⁷ Ե. ed princ.

⁸⁸ Աթանասն ed princ.: ditt.

⁸⁹ Զ. ed princ.

⁹⁰ Ամասիա ed sec.

⁹¹ ամենեքեան ed princ.

⁹² եկին ed princ.

⁹³ լինելով ed tert.: typographical error

⁹⁴ For the location of Manazkert on a contemporary map, see Hewsens 1997: 148-49 and Mahé 1993: 482-83.

⁹⁵ Fourth month of the Armenian calendar.

in the village of Manazkert in the region of Apahunik'. Under the leadership of the excellent lover of wisdom, the philosopher Grigoris, chorepiscopus of Aršarunik⁹⁶ the Christ-loving lord bishops gathered, as follows: Albēos of Hark', T'adēos of <Ostan>,⁹⁷ Sahak of the Mamikonians, Yesu⁹⁸ of Basen, Sargis of Tayk',⁹⁹ T'ēodoros¹⁰⁰ of Bznunik',¹⁰¹ Grigorēs, chorepiscopus of Aršarunik', together with all the bishops of Armenia, the priests and deacons, and the youths of the covenant¹⁰² of the holy Church, who assembled in one place with the assistance of the Holy Spirit, reinforcing the orthodox faith concerning the economy of the Word of God.

20 In addition there were others with us, six bishops of the Jacobite house in order to achieve unity of confession with us, whose names are the following: the first Constantine bishop of . . . , second Basil, metropolitan of the city of Edessa, third Simeon, bishop of Harran, fourth Theodore, bishop of Germanicia, fifth the Lord Athanasius, bishop of Martyropolis, sixth Theodore, bishop of Amasia.¹⁰³ 21 They had all journeyed [to hold] a joint synod with us at the behest of the archbishop of Antioch.¹⁰⁴ Uniting together in faith and confessing that union, we structured many discourses against the diophysites of Chalcedon and uprooted the darnel¹⁰⁵ of corruption sewn and broadcast by Ezr up until this juncture, as a result of which many were lost to the dyophysite faith, and we expelled the malaise of the Council of Chalcedon, bringing to orthodoxy also those who had fallen under their confession, constructing [such an edifice] that from now until eternity they will be unable to strive against and topple the record of orthodox confession in Christ.

Armenian and Syrian Terminological Diversity and its Impact on Deliberations

Michael the Syrian's account continues by observing that after Gabriel's expulsion a long discussion ensued on the appropriateness of imputing the category of corruption to Christ's flesh and the precise meaning this term should convey in that context. Clearly in this the Armenian bishops were pursuing Gabriel's charge of Severan corruption against the West Syrians, and from their reaction it is obvious they harbored deep reservations. The Syrians adduced various examples from Scripture and nature in support of their application of the term, while their Armenian counterparts balanced this with others underscoring His being free from corruption.

Ultimately, the Syrians invoked Paul's sermon on the resurrection at Acts 13:34 to the effect that 'since He [God] raised Him from the dead, He is not to return to corruption again' (q̄h j̄arōnjg q̄nā h̄ m̄nēljng l̄ n̄x lu ḡarōnāljng l̄ j̄aṣaṣlānōl̄p̄hln̄). Attention focused on the word 'again', which was found to be present in both the Syriac and Armenian text (i.e. lu). This indicated that Christ had therefore experienced corruption once, which the Syrians, following Severus' perspective, understood as pertaining to His assumption of postlapsarian humanity. Armenian opposition to the term's application to Christ's flesh stemmed from their interpretation of it as referring solely to the process of bodily decay and decomposition that was expressly excluded by the act of resurrection.¹⁰⁶

Michael's account presents this development as a crucial watershed in the proceedings. As the Armenian bishops had no rejoinder to the Syrians on the point, they accepted the authority of the scriptural witness, as a result of which both sides dispensed with rigor in defining doctrine, which could have been disruptive in the circumstances and led to an ineluctable impasse. Indeed, Bar Hebraeus' version illustrates the distance between the two parties in stating the Syrians viewed the Armenian position as 'childish opinions lacking instruction'.¹⁰⁷ Therefore, they were guided by tact in formulating a creed and accompanying *anathemata* that would not jeopardize propositions regarded as dogma, while clearly proscribing heretical views as outside the acceptable norms.

What is even more striking in Michael's narrative is the depiction of Ōjnec'i's role. The account matches the hierarch's own description in underlining his eagerness to arrive at an agreement. Thus, it states that he was 'hastening' towards that conclusion, and hence the impression is even given that he was somewhat concerned by the long disquisition on corruption, which seemed to be polarizing the two sides rather than bringing them to consensus. Consequently, he is portrayed as 'very pleased' that the Syrians bring forth conclusive scriptural support, and he is the one to ask his compatriots what response they have to this finding. Although Michael does not elaborate on the heresies to be anathematized, his editor Chabot argues that this refers to Chalcedon, thus once more substantiating Ōjnec'i's account.¹⁰⁸ Hence, the doctrinal exposition the

⁹⁶ On his biography, see Grigoris Aršaruni, 1964: 9–20.

⁹⁷ Michael's Syr text is corrupt here with regard to the name and place.

⁹⁸ Michael's Syr text is corrupt here.

⁹⁹ Michael's Syr text is corrupt here.

¹⁰⁰ Michael's Syr text is corrupt here.

¹⁰¹ After T'ēodoros Mich Syr adds T'ēodoros of Asamunik'

¹⁰² The expression *in situ* refers broadly to the lower clergy. For its early Syrian monastic origins, see Vööbus 1961.

¹⁰³ See also n. 54.

¹⁰⁴ The reference is to the West Syrian patriarch of Antioch.

¹⁰⁵ Matth 13: 25–40.

¹⁰⁶ See Cowe 2004: 37–38.

¹⁰⁷ Bar Hebraeus 1872, col. 302.

¹⁰⁸ Michael the Syrian, 1901, vol. II: 495. It is interesting that the two Armenian versions of Michael's chronicle afford a different narrative of the proceedings, emphasizing the ineffectualness of applying to Scripture and therefore removing the problem posed for the Armenian perspective on the term corruption. They state that Gabriel's argument pivoted on Christ's not undergoing corruption 'hereafter' (*uṣjunh̄t̄n̄l̄*), a term absent from the Syriac and Armenian Bibles, as a result of which they anathematized him and removed him from the conclave (Michael the Syrian, 1870: 352–53; 1871: 340).

catholicos provides in the Canon, offering a detailed analysis of the complementary use of the terms Son of God and Son of Man in the Fourth Gospel to interpret the union of the natures in Christ may reflect one of the 'frequent discourses' he delivered during the synod.

22 Վասն զի խոստովանիմք մի բնութիւն Բանին և մարմնոյն, Աստուած կատարեալ և մարդ կատարեալ, և միաւորեալ անբաժանաբար յստակ միացեալ բնութեամբ և անշփոթ միութեամբ, անսկզբանն ընդ սկզբանն, Բանն ընդ մարմինն, ըստ այնմ եթէ՝ «Ի սկզբանէ էր Բանն, և Բանն էր առ Աստուած. և Աստուած էր Բանն»: «Բանն մարմին եղև, և բնակեաց ի մեզ»: 23 Եւ ինքն Որդին¹⁰⁹ ասէ, «Ոչ ոք ել յերկինս, եթէ ոչ որ էջն յերկնից որդին մարդոյ որ էն յերկինս»: 24 Եւ Լուսաւորիքին մեր մեկնէ ասելով. «Տեսանեմ<զի> իջեալն յերկիրս, և էն յերկինս»¹¹⁰, այս է առ ի զմարդն աստուածացուցանելոյ, զոր և ասէ իսկ դարձեալ, թէ՝ «Տեսանիցէք զՈրդի մարդոյ զի ելանիցէ, ուր էր զառաջինն», այսինքն զմարդն աստուածացուցանել կոչէ, և մի բնութեամբ հանգոյն Հաւր, ի ծոց Էութեանն գերագանցէ զմարդկային բնութիւնս: 25 Ահա ճշմարիտ մի բնութիւն աստուածութեան և մարդկութեանն, զոր և ասէ Յովհաննէս. եթէ՝ «ԶԱստուած ոչ ոք ետես երբեք, բայց Միածին Որդին՝ որ ի ծոց Հաւր, նա պատմեաց մեզ»: 26 Այս է ելանելն ուր էր զառաջինն, և յառաջ քան զարև անուն նորա. վասն զի արգանդ և ծոց ասի ինքնին Էութիւն Հաւր, զոր և Տէր, Աստուածորդին մեկնեալ ուսուցանէ մեզ, վասն երկուց բնութեանց միաւորութեան, որով յոյժ վստահացեալ առաւելապէս խոստովանիմք՝ անորոշաբար միութիւն աստուածութեանն և մարդկութեանն ըստ վարդապետութեանն իւրում: 27 Իսկ Աստուած Բանն յասելն՝ «Ոչ ոք ել յերկինս եթէ ոչ որ էջն յերկնից որդի մարդոյ որ էն յերկինս», և «Որպէս Մովսէս բարձրացոյց զաւճն յանապատին, նոյնպէս բարձրանալ պարտ է որդւոյ մարդոյ». ահա որդին մարդոյ այս է. աղէ նայեա թէ զի նչ մեկնեալ դաստիարակէ ի մեզ որդին մարդոյ: 28 Վերագոյն որդի մարդոյ ասէ, իսկ ի ներքսագոյն ճառեալ՝ Աստուած միացեալ ի մարմնի և որդի Աստուծոյ: 29 Քանզի ասէ թէ, «Այնչափ սիրեաց Աստուած զաշխարհս մինչև զՈրդին իւր Միածին ետ». ահա մեկնեաց զորդին մարդոյ՝ Որդի Աստուծոյ, որ է մարդ և Աստուած ճշմարիտ, մի բնութեամբ, և՛ «Որ հաւատայ ի նա՝ ընդունի զկեանսն յաւիտենից»:

30 Արդ՝ աղէ նայեա և միտ դիր, վերագոյնն ասէ, «Ոչ ոք ել յերկինս՝ եթէ ոչ որ էջն յերկնից որդին մարդոյ որ էն յերկինս», և ի բացուստ ի ներքսագոյն ասէ՝ «Տեսանիցէք զորդի մարդոյ զի ելանիցէ,

ուր էր զառաջինն»: 31 Ահա ամփոփեաց միացոյց զԱստուածութիւնն և զմարդկութիւնն, և ընկղմեաց զմերայինս, խառնեաց յիւր Աստուածութիւնն, վասն զի անքակեցաւ ի մարմնի բնութեամբ և մեկնեալ պարզեաց ի մեզ զստակութիւն միացեալ բնութեանն: 32 Քանզի միութեամբ աստուածացոյց յասելն այսպէս, եթէ «Հոգին է կենդանարար, մարմին ինչ ոչ աւգնէ». և դարձեալ թէ՝ «Բանն զոր խառնեցայ ընդ ձեզ հոգի է և կեանք». և այլ վերագոյն ասէ. «Հոգի է Աստուած, և երկրպագուաց նորա պարտ է հոգւով և ճշմարտութեամբ երկիր պագանել»: 33 Ահաւասիկ բան, և հոգի, և կեանք. և մարդ, և որդի մարդոյ միացեալ՝ Աստուած ճշմարիտ ուսուցանելով մեզ: 34 Քանզի ասէ դարձեալ, եթէ՝ «Ոչ կարէ որդի մարդոյ առնել յանձնէ և ոչինչ, եթէ ոչ տեսանիցէ զՀայրն զի առնէ, զի զոր նայն առնէ, գնոյն և Որդի նմին նման գործէ»: 35 Եւ դարձեալ թէ՝ «Որպէս Հայր յարուցանէ զմեռեալս և կենդանի առնէ, նոյնպէս և Որդին զորս կամի կենդանի առնէ». և «Որ զբանն իմ լսէ և հաւատայ այնմ որ առաքեացն զիս», և որ ի կարգին է: 36 Եւ դարձեալ թէ, «արդարև ասեմ ձեզ, զի զայ ժամանակ և արդէն իսկ է, յորժամ մեռեալք լուիցեն ձայնի Որդւոյն Աստուծոյ», և որ ի կարգին է, և որոշէ ի կողմանս երկուս, <ի> յարութիւն կենաց և տանջանս դատաստանի:

22 'For we confess one nature of the Word and the flesh, perfect God and perfect man, and conjoined indivisibly with a distinct nature and unconfused union, the inoriginate with the originate, the Word with the flesh, according to the verse: 'In the beginning was the Word and the Word was with God, and the Word was God.'¹¹¹ 'The Word became flesh and dwelt among us.'¹¹² 23 The Son Himself also says 'No one has ascended to heaven except the One who descended from heaven, the Son of Man who is in heaven.'¹¹³ 24 Our Illuminator also interprets it, saying, 'I see that the One who descended to the earth is also in heaven.'¹¹⁴ This is in order to divinize man, as He also says again, 'You will see the Son of Man ascending where He was before,'¹¹⁵ that is, He is calling man to be divinized. And, being one in nature like the Father, He surpasses our human nature in the bosom of His essence.'¹¹⁶ 25 See the true single nature of divinity and humanity, which John refers to [in saying] 'No one has ever seen God except the Only-begotten Son in the bosom of the Father. He has told us [about Him].'¹¹⁷ 26 This is what is meant by 'ascending where He was before' and 'before the sun [is] His name,'¹¹⁸ since the womb and bosom signify the Father's very essence, which the Lord, the Son of God, expounds to teach us concerning the union of two natures. Utterly convinced by that, we confess all the more the union of divinity and humanity inseparably

¹¹¹ Jhn 1:1.

¹¹² Jhn 1: 14

¹¹³ Jhn 3: 13.

¹¹⁴ Agath. §706.

¹¹⁵ Jhn 6:16.

¹¹⁶ Jhn 1:18

¹¹⁷ Jhn 1:18.

¹¹⁸ Ps 72 [71 LXX]: 17.

¹⁰⁹ Որդի ed. quart.

¹¹⁰ Տեսանեմ u զի և իջեալ(ն) յերկիր և է յերկինս: Agathangelos, 1980, §706.

according to His teaching. 27 Now God the Word says 'No one has ascended to heaven except the One who descended from heaven, the Son of Man who is in heaven,'¹¹⁹ and 'As Moses raised the serpent in the desert, so the Son of Man should rise.'¹²⁰ See, this is the Son of Man. Come, look at what the Son of Man expounds to instruct us. 28 Above He says Son of Man, while later in His discourse [He talks about] God united in the flesh and Son of God. 29 For He says 'So much did God love the world that He gave his Only-begotten Son.'¹²¹ See, He has interpreted the Son of Man as Son of God, who is both true man and [true] God, one in nature and 'the one who believes in Him will receive eternal life.'¹²²

30 'Now come, see, and attend. Above He says 'No one has ascended to heaven, except the One who descended from heaven, the Son of Man who is in heaven'¹²³ and moving from the external to the internal, He states 'You will see the Son of Man ascending where He was before.'¹²⁴ 31 See [thereby] He embraced and united the divinity and humanity and absorbed that which is ours and united it with His divinity, since He has become inseparable in the flesh with regard to nature and He expounded and clarified for us the distinctness of His united nature. 32 Since in uniting [humanity] He divinized it in stating thus 'The Spirit is life-giving, while the flesh is of no avail.'¹²⁵ And again 'The word which I spoke with you is spirit and life.'¹²⁶ And above He said 'God is spirit and His worshippers should worship Him in spirit and truth.'¹²⁷ 33 Behold, word, spirit, and life, and man and the Son of God united, teaching us that He is true God. 34 For He says again 'The Son of Man can do nothing by Himself apart from what He sees the Father doing, and what He does, the same does the Son do like Him.'¹²⁸ 35 And again 'As the Father raises the dead and makes them alive, so the Son makes alive those He wishes.'¹²⁹ And 'The one who listens to my word and believes on Him who sent me,'¹³⁰ and the continuation. 36 And again 'Truly I say to you that the hour is coming and is already here when the dead will hear the voice of the Son of God'¹³¹ and the continuation. And He divides [them] into two groups, [one for] resurrection to life and [the other for] the torment of judgment.'¹³²

Different Perceptions of the Corruptibility of Christ's Flesh and their Creedal Articulation

Michael the Syrian's allusion to devising *anathemata* in such a way as to reject heresy without jeopardizing

propositions regarded as dogma, bearing in mind the patent difference of viewpoint between the Armenian and Syrian contingents with regard to the issue of corruption, can be verified with reference to some of the formulae employed there. Perhaps the most striking example is provided by no. 6 where the Armenian text presents the orthodox confession as affirming Christ's flesh is incorrupt from the union of natures until eternity and condemns the contrary approach that His flesh was corruptible until the resurrection and only thereafter became incorrupt, which is standard Armenian doctrine. Significantly, the Syriac text diverges from this clear-cut presentation of alternatives by nuancing it to state that one must not confess Christ's flesh corruptible after the union of natures '**in a sense other than that employed by the prophets, apostles, Fathers, and teachers**' (emphasis mine) and only incorruptible after the resurrection. Clearly, the exception introduced allows the Syrians to follow their teacher Severus in his interpretation of the term corruption without incurring the charge of heresy. While it would be possible for the Armenians to accept the application of corruption to refer to the Word's voluntary acceptance of the human condition, even though that was not their primary understanding of the term, there would still remain a difference in the understanding of the impact of the resurrection. The Syrians would contend this betokened a transition from corruptibility to incorruption, while the Armenians maintained no such development as a result of their perception of the significance of the union of natures. In the context of the union it is no longer appropriate to consider Christ's humanity purely in terms of its innate properties (e.g. corruptibility) but rather with regard to its relation with the divinity, which strengthens the humanity in such a way that 'in the union' the flesh must already be affirmed as incorruptible.

From other variations in formulation in the *anathemata* it is clear that the Syrian signatories were unaware of this insight and its broader theological significance. Indeed, Michael himself comments on the treatment of the resurrection in Acts as implying that 'He was raised in the impassibility and incorruptibility that we also hope to obtain,'¹³³ indicating that the Severian perspective on corruption manifested by the bishops at Manazkert continued to retain its authority into the Middle Ages.

The divergence on the applicability of the term corruption in an account of the incarnation that emerged in the course of the synod's deliberations also found textual expression in the documents enshrining the gathering's binding conclusions, as noted above in connection with the Armenian and Syriac *anathemata*. Unfortunately, the Synodal Tome containing the creed

¹¹⁹ Jhn 3:13.

¹²⁰ Jhn 3:14.

¹²¹ Jhn 3:16.

¹²² Jhn 6:47.

¹²³ Jhn 3:13.

¹²⁴ Jhn 6:16.

¹²⁵ Jhn 6:64.

¹²⁶ Jhn 6:64.

¹²⁷ Jhn 4:24.

¹²⁸ Jhn 5:19.

¹²⁹ Jhn 5: 21.

¹³⁰ Jhn 15:21.

¹³¹ Jhn 5:25.

¹³² cf. Jhn 5:29.

¹³³ Michael the Syrian, 1901, vol. I: 461, vol. II: 494.

has only been preserved in Syriac, Ȫjnec'i's creedal statement in §§42-44 of his Canon reproduced below focusing much more narrowly on Christology than the other text.¹³⁴ Nevertheless, it appears that here, too, the formulation as it stands reveals an accommodation to the same Severian approach in the concluding reference to Christ's resurrection 'for impassibility and immortality,' albeit in situ it purports to represent the Armenian creed, which the catholicos is transmitting to the Syrian participants after finding that the one they had submitted to him is in accordance with Christian tradition. Congruent with that, the treatment of Christ's experience of human passions foregrounds the fundamental differentiation between humanity and divinity rather than their interaction in the affirmation 'He truly suffered and died in a passible flesh, who was by His nature above passions as God.' This clearly contrasts neatly with Ȫjnec'i's definition below that emphasizes the importance of acknowledging the multilevel interrelation of divinity with humanity in the new reality of the union as the necessary prism through which all facets of the incarnation must be viewed.

God the Word <assumed> our passible flesh . . . <and> united the impassible with the passible, rendering it impassible . . . uniting [Himself] with our humanity impassibly and indivisibly, always God and man, and not a duality but an everlasting union.¹³⁵

Similarly, without going into detail, Ȫjnec'i's creed concludes with the traditional Armenian doctrine of 'a union of divinity and humanity incorruptibly', which would naturally present the same sort of problem for the Syrian contingent at the synod.

Nevertheless, viewing the two creedal statements more broadly, it is obvious that both are effective instruments in condemning the excesses of an extreme diophysite account of the incarnation, which would thereby unify the Armenians and Syrians against the Nestorians and Chalcedonians, as well as inveighing against the core beliefs of Julianists in defending Christ's consubstantiality with us in our humanity. It is presumably this area of communality that Ȫjnec'i has in mind in referring to the Syrian bishops' affirming their consent and returning in peace, glorifying God.¹³⁶

Once again, Michael the Syrian's narrative is more extensive, indicating that the two communities sealed their unity by celebrating the eucharist, first in the Syrian style and then according to the Armenian rite,

before moving to inscribe their agreement in written form.

The Synodal Tome of Manazkert as Preserved in Syriac

'We believe in the Father, the Son, and the Holy Spirit, a single nature of divinity, three hypostases and three persons. The Father is the principle and cause of the Son and the Holy Spirit, of the Son by generation and the Holy Spirit by procession. But because there is but a sole nature of divinity, one should not affirm that the Holy Trinity is only one hypostasis and one person . . .

We believe that God the Word, the only Son of the Father, descended and rested in the chaste womb of the holy Virgin Mary and that He fashioned Himself as perfect man from her, that is He assumed definitively from our race a body, soul, and mind without changing in any way what He was . . . and He united Himself indissolubly and immutably.

The One who was born of her [the Virgin] is truly God, who united Himself hypostatically with the flesh and became man. The selfsame is both divinely and humanly one single Son, a single Savior, a single hypostasis, a single Christ, a single nature of God the Word incarnate. We confess that the same God the Word performed the miracles as God and underwent human conditions as man, for He is both perfect God and perfect man. God the Word incarnate bore everything human like unto us except for sin. . . . He truly suffered and died in a passible flesh, who was by His nature above passions as God. He rose on the third day in the body born of the Virgin for impassibility and immortality . . .

*This is the faith we have received from the apostles and Fathers, in conformity with the teaching of the three councils, Nicaea, Constantinople, and Ephesus.'*¹³⁷

42 Այս է ճշմարիտ միութիւն Աստուածութեան և մարդկութեան անբաժանաբար, և ոչ երկուութիւն բաժանաբար հակառակ միմեանց, որոշելով զախտականն յանախտականէն՝ ըստ անջատման ի միմեանց չար աղանդոյն Քաղկեդոնի, որ զԵրրորդութիւնն դաւանեալ չորրորդութիւն խոստովանին ըստ անիծեալ տումարին Լևոնի, և Բ բնութիւնս խոստովանեալ ասեն, այլ որ յԱստուծոյ, և այլ որ ի Սարիամայ, այլ աստուածութիւնն, և այլ մարդկութիւնն, յատուկք և զանազանք ի միմեանց: 43 Վասն որոյ նգովեալ խոստովանութիւնն ինքեամբք հանդերձ:

44 Իսկ մեր խոստովանիմք զմարմինն զախտական և զցանկական զմեռոտ և զմաշական բնութիւնս մեր <առեալ և> խառնեալ զանախտականն ընդ ախտականիս և արարեալ անախտական, <զ>անմեռն ընդ մեռոտս և արարեալ զմեռոտն՝ անմեռ. միաւորեալ Աստուած Բանն ընդ

¹³⁴ For the Synodal Tome, see Michael the Syrian, vol. I: 459-61, vol. II, 1901: 496-99.

¹³⁵ *Matenagirk' Hayoc'*, vol. 7, 2007: 126.

¹³⁶ *Matenagirk' Hayoc'*, vol. 7, 2007: 127.

¹³⁷ Michael the Syrian, 1901, vol. I: 461, vol. II: 499.

մարդկութեանս անախտաբար, և անորիշ՝ միշտ Աստուած և մարդ, և ոչ երկուութիւն, այլ միութիւն հանապազորդ: 45 Այսպէս գրաւեալք եղիցուք խոստովանութեամբ, և կարգեալ դիցուք ճառս յաճախս և առաւելս ըստ կարգի խոստովանութեանս մերում, զոր եւ Յովհաննէս Հայոց հայրապետս կարգեցի ձեզ կէտ սահմանադրութեան, միութիւն խոստովանելով աստուածութեանն և մարդկութեանն անապականաբար, վասն որոյ բարի ընկալ հաճութեամբ զայս խոստովանութիւն ընկալեալ հաճեցան հայրապետքն Ասորոց, և ընկալեալ ողջոյն գնացին խաղաղութեամբ յաշխարհն իւրեանց, փառաւորելով զԱստուած յաւիտեանս, ամէն:

42 *This is a true union of divinity and humanity [effected] inseparably, and not a duality separably opposing one another, dividing the passible from the impassible according to the disjunction from one another [associated with] the evil sect of Chalcedon, which confesses the Trinity as a quaternity according to Leo's accursed tome, and, confessing two natures, they state that one [nature] is from God and the other from Mary [and that] one is the divinity and the other the humanity, discrete and differentiated from one another. 43 That is why their confession is anathema together with the persons [of the signatories].*

44 *In contrast, we confess that God the Word <assumed> our passible flesh and our concupiscent [and] mortal nature subject to entropy <and> united the impassible with the passible, rendering it impassible, the immortal with the mortal, rendering the mortal immortal, uniting [Himself] with our humanity impassibly and indivisibly, always God and man, and not a duality but an everlasting union. 45 Thus may we be captivated by the confession, and order and arrange frequent, more numerous discourses according to the form of our confession, which I Yovhannēs, patriarch of the Armenians, appointed for you as a point of definition, confessing a union of divinity and humanity incorruptibly, concerning which the hierarchs of the Syrians were well pleased to accept this confession, and, receiving [our] valediction, they went in peace to their country, glorifying God for ever. Amen.*

Liturgical Implications of the Synod of Manazkert for Greater Armenia

A large section of Ōjneç'i's Canon (§§46-94) is devoted to a discussion of six liturgical practices on which the Armenian tradition differed from the Byzantine: 1) the keeping of a five-day pre-Lenten fast (առաջաւորաց), 2) not offering the laity communion on Holy Thursday, 3) the mode of breaking the fast on the Saturdays and Sundays of Great Lent, 4) not adding leaven to the eucharistic bread, 5) not adding water to the eucharistic wine, and 6) the joint celebration of the feasts of the Nativity and Baptism of Christ at Theophany (January

6). Some of these matters had already been dealt with at the Synod of Duin of 719 but from a very different perspective. Thus 3) is discussed in canon §7 there, where the decision on whether and how to break the fast is left to the individual believer's conscience.¹³⁸ Similarly 4) and 5) feature in canon §8 where the appeal is to hallowed Armenian custom established by St. Gregory the Illuminator in contrast to other Christian traditions that the faithful are to retain without deviating through innovation, which from patristic times was regarded as a grave error.¹³⁹ Finally, 6) is treated in canons §§26 and 30 from a purely ritual viewpoint, noting the importance of combining readings for both the Nativity and Baptism over the whole octave of the feast, which, as the catholicos remarks, 'I consider appropriate' (պատշաճ վարկանիս).¹⁴⁰

Clearly, the practices under consideration differentiated the Armenians not only from the Byzantines but also from the Syrians, and the catholicos turns to this topic after narrating the departure of the Syrian delegation in §45.¹⁴¹ However, the diversity in terminology employed in fixing the various canons in this section suggests that at least some of those issues were debated at the synod. Hence, the authority for his pronouncement on how the fast should be broken on the Saturdays and Sundays of Lent is given in §77 to the effect that:

'See we have written (գրեցաք) this canon, I, Yovhannēs, catholicos of Armenia, with all the bishops and priests and youths of the covenant of the Holy Church.'

However, in other cases such as that of Theophany in §94 the formula is singular, emphasizing the catholicos' role as decision maker:

*'See, I, Yovhannēs, catholicos of Armenia, wrote (գրեցի) this canon with my own hand.'*¹⁴²

The significance of this liturgical discussion within the broader context of the Christological disquisition that precedes it lies in a profound understanding of their mutuality and interdependence. In this way, the work as a whole represents a powerful expression of the principle *lex orandi lex credendi*, i.e. liturgics is theology, in the sense that right faith and right worship are integral to one another. Thus in revisiting certain rites already considered at Duin seven years earlier the catholicos approaches them from a totally different standpoint, that of the core doctrine of unity versus duality, which, he contends, encapsulates all the other

¹³⁸ Hakobyan 1964: 518-19.

¹³⁹ Hakobyan 1964: 519.

¹⁴⁰ Hakobyan 1964: 532, 534.

¹⁴¹ For the difference in customs between the Armenians and Syrians, see Michael the Syrian, 1901, vol. 1: 458, vol. II: 492.

¹⁴² Ōjneç'i, *Matenagirk' Hayoc'*, vol. 7, 2007: 131.

sub-issues.¹⁴³ Building on earlier precedents, he argues for the necessity of combining the Nativity and Baptism because of the union of natures as the Word becomes man and undergoes baptism for humanity's purification and salvation in contrast to Chalcedonian dualism. Similarly, in determining how the fast should be broken at §§75-76, after listing the foodstuffs permitted, Ȫj nec'i rhetorically concludes with the expression 'let us ordain unitary-dietary food' (միաճաշակ կերակուր կարգեսցուք) in contrast to the opposite practice associated with the Chalcedonians, which is anathematized:

*'Now, if anyone from this day forth and hereafter divides (բաժանէ) all this from each other, let him be anathema.'*¹⁴⁴

In doing so, it appears that the catholicos, whose style in this work is marked by neologism, has employed the operative adjective միաճաշակ in a novel sense in keeping with the theme of union and division. Whereas it tends to be used of the regimen of ascetics who allow themselves only one meal a day, here it describes one authoritative list of foods to be applied universally within the church, excluding the possibility of other more rigorist regulators seeking to discriminate between them and prohibit the faithful from eating some.

Similarly, on the question of fasting Ȫj nec'i utilizes the same Christological language and imagery in §56 of uniting two into one, i.e. the pre-Lenten with the Lenten in contrast to Chalcedonian practice:

*'Let us bind and seal the pre-Lenten fast . . . with the fast of Holy Easter, rendering it indivisible (անբաժանելի) and inseparable (անորժիշ) . . .'*¹⁴⁵

The final issue, that of the eucharistic elements, relates not only to the question of duality, i.e. adding water to the wine or leaven to the bread, but to the symbolism of corruption associated with the resulting state of mould or vinegar. Here, too, Ȫj nec'i is dependent on a body of literature reverting at least to catholicos Movses II Ehuardec'i (574-604),¹⁴⁶ which he has developed by placing it more directly in the context of the miaphysite-diophysite debate. Thus at §53 he states that diophysites aver that 'the Lord's flesh is corrupt' and hence draws the liturgical conclusion in rhetorical vein that the Armenian Church should now 'abolish the nature of the mixing of corruptions (զբնութիւն խառնուածոյն ապականութեանց) and in discourse should make pronouncements against

them incorruptibly (անապականաբար) to hasten the oblivion of the mixing of corruption (զխառնումն ապականութեան), having separated (որոշեալ) them by rendering them uncommemorated so that the religion of Armenia would regain its own identity (սեպհականեցի).'¹⁴⁷

Thereafter the final section of the Canon (§§95-97) is devoted to the recipient Grigoris Aršaruni where, in continuity with his overarching perspective of unity and unification, he requests his colleague to produce a commentary combining the liturgical lections for the pre-Lenten fast with those appointed for Lent. It is striking that the extant commentary transmitted under his name and commissioned by the aristocrat Vahan Kamsarakan, which predates the synod by some decades (since it appears the noble died in 705), significantly incorporates Ȫj nec'i's concerns. The author stresses the unity of the celebration of the Nativity and Baptism at Theophany, connects the pre-Lenten fast with Lent and provides a unitary focus for the whole structure in demonstrating how the various Old Testament Figures highlighted in the readings typologically preFigure Christ.¹⁴⁸

Analysis of the Armenian and Syriac Versions of the Anathemata

As the following comparative exposition of the evidence reveals, several of the ten *anathemata* accepted by the signatories to the synod reveal a close relation between the Armenian and Syriac forms, which suggests that they derive from a single early source. Granted that the conclave was primarily an Armenian event presided over by the catholicos, while the Syrian contingent was much smaller, we may presume that the Armenian formulation would have been the primary text, which was then rendered into Syriac.

In keeping with the above, it is observable that the Armenian version of the *anathemata* maintains more formal consistency throughout, each unit opening with a negative conditional clause (if one does not confess/state . . .), whereas its Syriac counterpart is characterized by internal variation, the third unit transposing the negative into the body of the confession (if anyone states that God the Word did *not* unite . . .), while numbers six to nine adhere to a second pattern (everyone

¹⁴³ The fact that these decisions find no place in the Book of Canons suggests its compilation predates the synod. See Mardirossian 2004: 274.

¹⁴⁴ Ȫj nec'i, *Matenagirk' Hayoc'*, vol. 7, 2007: 130.

¹⁴⁵ Ȫj nec'i, *Matenagirk' Hayoc'*, vol. 7, 2007: 128.

¹⁴⁶ Cowe 2004: 39-40.

¹⁴⁷ For this extended rhetorical wordplay, see Ȫj nec'i, *Matenagirk' Hayoc'*, vol. 7, 2007: 127. The overall context of these remarks suggests that this interpretation of the eucharist represented the catholicos' deeply held beliefs regarding the danger of corruption symbolism, despite their absence from the terse formulations of the Synod of Duin. Bearing in mind their continuity with the views of Armenian theologians of earlier and later times, I would argue these views represent the mainstream norms of the church. Cf. Garsoïan 2012: 92-94.

¹⁴⁸ Grigoris Aršaruni, 1964: 9-20. For a study of another commentary once ascribed to him, see Cowe 2006.

that does not confess . . .) and the final to a third (we anathematize . . . we accept). Moreover, the Syriac lacks an equivalent for the ninth Armenian anathema, and its final example not only does not match the Armenian formulation, but varies radically in contents, departing from the precise, focused definitions of the preceding measures to embrace all heresies in a way that suggests its secondary character.

At the same time, both traditions have undergone changes in transmission involving unintentional copying errors as well as others that appear more deliberate interventions on theological grounds. It appears that the Syriac has suffered less at the hands of scribes, especially with regard to minor omissions in the Armenian, so that it can assist us in reconstituting a more pristine textual form. Nevertheless, as mentioned above, doctrinally it maintains a very distinct pro-Severian profile diverging from the Armenian formulations.

In presenting the comparative evidence below I have collated the form of the *anathemata* preserved in the two printed editions as well as in the miscellany manuscript no. 1869 of the Matenadaran Institute of Ancient Manuscripts in Yerevan where it occupies folios 299v-300v.¹⁴⁹ The codex was produced in Eudocia (Tok'at) by the deacon Andrēas for his own purposes over the years 1585-89. It contains various lists and selections from historians, chronicles, biblical commentaries, theological, liturgical and canonical texts, and an alphabetic primer, concluding with the scribe's own chronicle of the period.¹⁵⁰ Appropriate sections from Ōjneć'i's Canon and the Synodal Tome have been included to reveal the degree of theological continuity. All the textual emphases are mine.

Նգովքն յառաջին¹⁵¹ ժողովն¹⁵² Մանազկերտի

The Anathemata at the First Synod of Manazkert

A) Ōjneć'i's Canon §42 the evil sect of Chalcedon . . . confesses the Trinity as a quaternity according to Leo's accursed tome . . .

Synodal Tome: We believe in the Father, the Son, and the Holy Spirit, a single nature of divinity, three hypostases and three persons. The Father is the principle and cause of the Son and the Holy Spirit, of the Son by generation and the Holy Spirit by procession. But because there

is but a sole nature of divinity, one should not affirm that the holy Trinity is only one hypostasis and one person. And because there are three perfect hypostases of divinity, one should not affirm that there are three natures separated from one another, but a single nature, a single energy, a single will, a single natural operation of the Father, Son, and Holy Spirit.¹⁵³

ա. Եթէ ոք ոչ խոստովանի զսուրբ երրորդութիւնն մի բնութիւն և մի աստուածութիւն յերիս դէմս և յերիս անձնաւորութիւնս <երկրպագեալս> կատարեալս հաւասարս՝ նգովեալ եղիցի:

1. 'If anyone does not confess the holy Trinity [to be] one nature and one divinity in three hypostases and in three persons<adorable>perfect [and] equal, let him be anathema.'

1. Syr. 'If anyone does not confess that the holy **consubstantial** Trinity is one nature and one divinity, three hypostases and three persons, adorable, equal, and perfect, let him be anathema.'

As is normal in creedal structures, the *anathemata* begin with the inner life of the Trinity outside time, as in the case of the Synodal Tome, whose terminology and emphasis the anathema closely mirrors in maintaining the distinction between unity of essence and diversity of hypostases established by the Councils of Nicaea and Constantinople. Bearing in mind Ōjneć'i's typical condemnation of extreme diophysitism as introducing a fourth 'person' into Trinitarian relations with regard to the 'man' assumed at the incarnation, the anathema may be primarily directed against Chalcedonians.

The Syriac qualification of the Trinity by the Nicene term 'consubstantial' is highly appropriate, but it is hard to explain how, if original, its Armenian equivalent *համազոյ* could easily have fallen out in copying. Meanwhile, it is likely that the Armenian term for 'adorable' (*երկեպագեալս*) fell out in copying by *parablepsis* through *homoeoteleuton*.¹⁵⁴

B) Ōjneć'i's Canon §22: . . . 'we confess one nature of the Word and the flesh, perfect God and perfect man, and conjoined indivisibly with a distinct united nature and unconfused union, the inoriginate with the originate, the Word with the flesh . . .'

Synodal Tome: 'We believe that God the Word, the only Son of the Father, descended and dwelt in the chaste womb of the holy Virgin Mary and that He became a perfect man from her, that is He assumed definitively from us a body, soul, and mind without changing in any way what He was . . . and He unified Himself indissolubly and immutably. . .'

¹⁴⁹ Eganyan et al. 1965, col. 662.

¹⁵⁰ For previous publications of the text preserved in this manuscript, see Xosrovik T'argmanič', 1899, and Samuēl Anec'i, 1893: 187-88.

¹⁵¹ On the basis of Č'amč'ean's partisan presentation of the data (on which, see n. 23), the first synod of Manazkert was earlier associated with a conclave that was supposed to have taken place in 651. See Mxit'areanc' 1874: 88-90.

¹⁵² ժողովն M1869

¹⁵³ Michael the Syrian, vol. II, 1901: 498.

¹⁵⁴ For the use of the term in such contexts, see Step'anos Siwnec'i, *Matenagirk' Hayoc'*, vol. 8, 2007: 457.

բ. Եթէ որ ոչ խոստովանեցի զԲանն Աստուած մարմնացեալ ի սրբոյ կուսէն ճշմարտութեամբ՝ այսինքն՝ զբնութիւնս մեր առեալ *ի նմանէ՝¹⁵⁵ զհոգի՝ և

զմարմին և զմիտս, առանց ապականութեան, <այլ>¹⁵⁶ ասիցէ կարծեալ¹⁵⁷ և նմանութեամբ <և ոչ իսկութեամբ>¹⁵⁸ երևեալ զՔրիստոս՝ նզովեալ եղիցի:

2. 'If anyone does not confess God the Word as truly having become incarnate from the holy Virgin, that is having assumed from her our nature, soul, body, and mind **without corruption**, <but> states that Christ appeared in a phantasm¹⁵⁹ and semblance<and not in reality>, let him be anathema.'

2. Syr 'If anyone does not confess that God the Word who truly became man from the holy Virgin united to Himself **a created and finite body**, that is to speak precisely a body, soul, and mind, but states that Christ appeared in a phantasm and apparition and not in reality, let him be anathema.'

The second anathema descends from the sphere of eternal relations among the Trinitarian persons to issues of the economy, asserting the reality of the Logos' incarnation in His birth from the Virgin Mary and consubstantiality with us in His full humanity, contrasting this with a Gnostic approach that would view His presence as that of an intangible phantasm. As such, the unit is clearly designed to target Julian and various Julianist groups like that of Mayraanec'i that argued Christ's body was human more in appearance than reality.¹⁶⁰ Both Ōjnec'i and the Tome present the incarnation in terms of His becoming 'perfect man', which the Armenian version manifests as 'our nature', which it then defines by the tripartite anthropology embodied in the Tome.

Here, too, it appears that the Syriac is secondary in explicating the term 'nature' more concretely as 'a created and finite body', before adducing the further clarification as 'body, soul, and mind', which preserves the logical order witnessed by the Tome. This, in turn, necessitates repeated reference to the 'body' as well as the root *swk* underlying 'finite' and 'precisely'. At the same time, the Armenian addition of the phrase 'without corruption' may be secondary, since each anathema is carefully crafted to address one primary subject, and the issue of the incorruptibility of Christ's flesh is treated in anathema six. However,

the Syrians' maintenance of Severus' application of the term corruption to refer to Christ's assumption of postlapsarian flesh might equally have motivated tridents to excise the term from the Syriac version.

Consistency of structure (if anyone does not confess . . . but . . .) and the Syriac parallel enable us to restore the Armenian asseverative at n. 134, while the parallel at n. 136 suggests that the phrase it highlights fell out of the text through *parablepsis* by *homoeoteleuton*.

C: Ōjnec'i's Canon §44: 'we confess that God the Word <assumed> our passible flesh and our concupiscent [and] mortal nature subject to entropy.'

Synodal Tome: 'We confess that the same God the Word . . . truly suffered and died in a passible flesh, who was by His nature above passions as God.'

գ. Եթէ որ ոչ ասիցէ ի մեղանչական և ի մահկանացու <և ապականացու>¹⁶¹ մերմէ բնութենէս առնուլ մարմին Բանին Աստուծոյ, այլ յանմեղ, յանմահ և յանապական¹⁶² բնութենէն զոր ունէր նախաստեղծն յառաջ քան զյանցանսն՝ նզովեալ եղիցի:

3. 'If anyone does not affirm that God the Word assumed flesh from our sinful, mortal, <and corruptible> nature, but rather from the sinless, immortal, and incorrupt nature, which the protoplast possessed before his transgression, let him be anathema.'

3. Syr 'If anyone states that God the Word did not unite¹⁶³ Himself with our mortal, sinful, and corruptible flesh, but with the flesh Adam had before his sin and which was **by grace** immortal, sinless, and incorruptible, let him be anathema.'

This anathema narrows the focus on the incarnation to heighten Christ's consubstantiality with us in our postlapsarian flesh with obvious significance for the doctrine of salvation, in contrast to the Julianist perspective according to which sin was physically transmitted by procreation, necessitating the postulation that Christ's flesh must have been prelapsarian in order to affirm Christ's humanity as not subject to sin. The qualification of the flesh as sinful, mortal, and corruptible is adduced by both Ōjnec'i and the Tome as well as the Syriac version, indicating its original presence in the Armenian text as well, from which it probably fell out through *parablepsis* by *homoeoteleuton*. In contrast, the Syriac reference

¹⁵⁵ զնմանէ ed princ.

¹⁵⁶ om M1869 edd. The conjunction, which must have fallen out of the text by *homoeoarcton*, can be reinstated in parallel with the other anathema formulations.

¹⁵⁷ կարծեօք ed princ.

¹⁵⁸ om M1869 edd. : *homoeotel*. The original text can be reconstituted on the basis of the Syriac version.

¹⁵⁹ 2 Cor 5:7.

¹⁶⁰ Cowe 2004: 42-43.

¹⁶¹ om M1869 edd. : *homoeotel*. The original text can be reconstituted on the basis of the Syriac version.

¹⁶² անապ. ed princ.

¹⁶³ It is notable that in both the second and third anathemata the Syriac idiom prefers to present the incarnation in terms of the Logos uniting Himself with human flesh rather than the Armenian phraseology of assuming flesh.

to Adam's flesh being immortal 'by grace' is likely a secondary addition motivated by Severian theology to the effect that the protoplast's immortality was not an innate quality of early humanity but a gift of divine grace, which was removed in consequence of the introduction of sin.¹⁶⁴

D) Өjneg'i's Canon §29: *'See, He has interpreted the Son of Man as Son of God, who is both true man and God, one in nature . . . §44 . . . we confess that God the Word <assumed> our passible flesh . . . uniting [Himself] with our humanity impassibly and indivisibly, always God and man, and not two natures but an everlasting union.'*

Synodal Tome: *'We confess that God the Word . . . fashioned Himself as perfect man . . . without changing in any way what He was, so that He could say, 'It is I and I have not changed' and He united Himself indissolubly and immutably . . . We confess that the same God the Word . . . is both perfect God and perfect man.'*

դ. Եթէ որ ոչ խոստովանեցի զմարմնացեալ Բանն Աստուած մի բնութիւն ըստ անճառ միաւորութեանն՝ ¹⁶⁵<>¹⁶⁶ որ յաստուածութենէն և ի մարդկութենէս, այլ է կամ ըստ բնութեան մի բնութիւն. և կամ եթէ ըստ շփոթութեան և ըստ փոփոխման մի բնութիւն՝ նզովեալ եղիցի:

4. *'If anyone does not confess God the Word incarnate as one nature according to the ineffable union, <> which is from divinity and our humanity, but that He is one nature either according to nature or one nature according to mixture and change, let him be anathema.'*

4. Syr *'If anyone does not state that this sole nature of divinity and humanity, that is Christ's, which is formed from divinity and humanity, is united in an exalted and ineffable union without mixture, <without>¹⁶⁷ division, without confusion, let him be anathema.'*

This unit affirms the miaphysite doctrine that the application of the one-nature formula to Christ relates to an indissoluble union of divinity and humanity. While that one nature is composite, it does not result from a mixing of the natures. Instead, the properties of Godhead and manhood remain intact. This view is expressed both by Өjneg'i and the Tome, the latter exercised to underline the immutability of the union and the lack of any change to the Logos's divinity in the incarnation. In its expression the Armenian version of the anathema references the Cyrilline formula of the 'one nature of God the Word incarnate' and explicitly defends the miaphysite doctrine from diophysite

(Nestorian and Chalcedonian) misrepresentation of its position in identifying the one nature with the divinity, thus undermining the reality of Christ's humanity. The anathema is clearly directed at Julianists like Mayragomec'i who argued that the one nature of the Word was divine, while His humanity was merely flesh.¹⁶⁸ The second clause envisages a union in which the natures coalesce in various ways reminiscent of the views of Apollinaris and Eutyches. At the same time, through a copyist's error the phrase 'which is in the divinity' cited in n. 58 has arisen from a secondary duplication of the following graphically similar phrase. The latter undermines the intelligibility of the unit, and its absence from the Syriac version provides grounds for excising it from the text.

Meanwhile, the Syriac version appears to be secondary in several key respects. Instead of immediately relating the one nature to God the Word, it defines it in terms of divinity and humanity and thereafter with regard to Christ, at which point the natures of divinity and humanity are unnecessarily repeated. The union is subsequently qualified by the honorific epithet 'exalted', which lacks precise theological significance, while the final interpretive phrases not only protect against perspectives of mixture and change, but introduce the antithetical concept of division, which is specifically targeted in anathema five.

E) Өjneg'i's Canon §42: *'This is a true union of divinity and humanity inseparably, and not a duality separably opposing one another, separating the passible from the impassible according to the disjunction from one another [associated with] the evil sect of Chalcedon, which professes the Trinity as a quaternity, confessing in accordance with Leo's accursed tome, and, confessing two natures, they state that one [nature] is from God and the other from Mary [and that] one is the divinity and the other the humanity, discrete and differentiated from one another.'*

Synodal Tome: *'The One who was born of her [the Virgin] is truly God, who united Himself hypostatically with the flesh and became man. The selfsame is both divinely and humanly one single Son, a single Savior, a single hypostasis, a single Christ, a single nature of God the Word incarnate.'*

ե. Եթէ որ ոչ խոստովանեցի զմի և զնոյն <Քրիստոս>¹⁶⁹ Աստուած և մարդ միանգամայն, այլ զայլ ոմն Աստուած ասիցէ և զայլ ոմն մարդ՝ նզովեալ եղիցի:

5. *'If anyone does not confess one and the same<Christ> both God and man together, but affirms one as God and another as man, let him be anathema.'*

¹⁶⁴ Cowe 2004: 37.

¹⁶⁵ -թեան ed sec.

¹⁶⁶ + որ յաստուածութեանն M1869 ed princ. : -թեան ed sec. : ditt.

¹⁶⁷ The form dl' can be restituted in the Syriac text on the basis of parallel formulations.

¹⁶⁸ Cowe 2004: 41.

¹⁶⁹ om M1869 edd. : homoeotel. The original text can be reconstituted on the basis of the Syriac version.

5. Syr 'If anyone does not confess that one and the same Christ is both God and man together, but **divides Him** and says that one is God and another is the man, let him be anathema.'

This unit defends Christ's unitary agency against extreme dualist positions like that of Nestorius, who argued for a distinction between the Logos and 'the man' and preferred to talk of a loose conjunction (συνάφεια) of natures rather than a full union (ἔνωσις). The thought is fully developed in Ōjnec'i's Canon §42 where the hierarch refers to some passages in Leo's Tome, which, it should be recalled, were expressly intended to combat Eutychian viewpoints, and imputes the perspective to Chalcedon also in keeping with his usual invective against the council. Here one should note that Armenians at this time probably did not have access to complete translations of the work, but consulted it purely via Timothy Aelurus' tendentious compilation of the fourteen most egregiously dualist formulations as a means of discrediting the document as a whole.¹⁷⁰ The Tome similarly emphasizes Christ's unity of person with a rhetorical series of images culminating in the Cyrilline formula mentioned above. Meanwhile, the Armenian version of the anathema presents the issue with economy of expression. The name of the referent, i.e. Christ, has fallen out of the text by scribal error, but can easily be reconstituted on the basis of the regularity of the pattern which confesses or affirms an object (the Trinity in 1; God the Word in 2-4; Christ in 6, 8-10; and the Lord's body in 7) as witnessed by the Syriac in this instance also. The Syriac version in this unit closely parallels the Armenian, the only exception being its explication of the introduction of a diversity of agency in Christ as thereby dividing His person.

F) Ōjnec'i's Canon §44: 'Meanwhile, we confess that God the Word <assumed> our passible flesh and our concupiscent [and] mortal nature subject to entropy <and> united the impassible with the passible, rendering it impassible, the immortal with the mortal, rendering the mortal immortal, uniting [Himself] with our humanity impassibly and indivisibly, always God and man, and not two natures but an everlasting union.'

գ. Եթէ որ ոչ ասիցէ զմարմինն Քրիստոսի անապական ի <ծննդէնէն>¹⁷¹ որ

ի կուսէն մինչև ցաւիտեան, ոչ ըստ բնութեան այլ ըստ անճառ միաւորութեան, այլ մինչև ցարութիւնն¹⁷² ապականացու և անփառաւոր և անկատար, և ապա յետ յարութեանն¹⁷³ ասիցէ եղև անապական և փառաւոր *և կատարեալ՝¹⁷⁴ նզովեալ եղիցի:

¹⁷⁰ For details, see Cowe 1998, 4-8.

¹⁷¹ ծննդէնէն M1869 ed princ. : ծննդէն ed sec.

¹⁷² -թին ed princ.

¹⁷³ -թեան ed princ.

¹⁷⁴ om ed princ. : homoeoteleuton.

6. 'If anyone does not affirm Christ's flesh as incorrupt from <His birth> from the Virgin until eternity, not according to nature, but according to the ineffable union, but rather affirms that it is corruptible and inglorious and imperfect until the resurrection and then after the resurrection became incorrupt and glorious and perfect, let him be anathema.'

6. Syr 'Everyone who confesses that Christ's flesh is corruptible, inglorious, and imperfect after the union and states that it was corruptible, inglorious, [and] imperfect from His conception to the resurrection, **in a sense other than that employed by the prophets, apostles, Fathers and teachers**, and that [only] after the resurrection is it incorruptible, glorious and perfect, let him be anathema.'

Synodal Tome: 'We confess that the same God the Word . . . truly suffered and died in a passible flesh, who was by His nature above passions as God. He rose on the third day in the body born of the Virgin for impassibility and immortality . . .'

This unit defines the precise understanding of how Christ's flesh is to be interpreted as incorruptible, not as referring to divinity nor to a mixture of divinity with humanity, but rather as a factor of the union through the interrelation of Godhead and manhood. This was to become a uniquely Armenian doctrine whose importance grew over the next few centuries.¹⁷⁵ As one might expect, it features some of the most significant variation between the two versions, reflecting the fundamental difference of approach enshrined in the communions they served. Ōjnec'i encapsulates the doctrine in his reflections on the Word's assuming passible flesh that was subject to entropy (ախտական) and was therefore corruptible, which He rendered impassible in the context of the union, indicating that his flesh was consubstantial with our postlapsarian form, as had been established in unit three, and was therefore characterized by a penchant to sin and mortality.

The Armenian version of the anathema elaborates this in analyzing the issue in its various facets. Christ's flesh was corruptible in nature as being human, but became incorruptible as a result of the union of the natures from His birth on until eternity. However, as clarified by anathema four, this transformation was not the product of any alteration to its properties, which remained intact in the union. Rather, as Ōjnec'i's close collaborator Xosrovik T'argmanič' indicates, Christ's divinity prevented His humanity from falling into sin and consequently from suffering the consequences of sin in death and corruption.¹⁷⁶ Indeed, according to the latter, the Word would reveal His power and glory in His humanity when He wished, a view incorporated in the affirmation in this anathema that Christ was incorrupt

¹⁷⁵ Cowe 2004: 49.

¹⁷⁶ Cowe 2004: 46-48.

and glorious and perfect throughout His whole earthly life because of the ineffable union of the natures.¹⁷⁷

The unit is therefore directed against Severus of Antioch's view that death is the outworking of a corruption natural to human life, since only God is incorrupt. Consequently, he interpreted Christ's humanity as being corruptible, mortal, and passible, only becoming incorrupt after the resurrection, as discussed previously.¹⁷⁸ This is obviously also the ground for employing the basic concluding formula of anathema ten with the introduction referring to construing the terms in a sense other than that employed by previous teachers, of whom the primary authority is clearly Severus. The reference to the Word's conception by the Virgin in the Syriac rather than the Armenian association with the womb may be a theological correction, since the underlying issue is that of the union of natures which was formed at Christ's conception not at His birth.

G) *Ōjnec'i's Canon §44: 'we confess that God the Word <assumed> our passible flesh and our concupiscent [and] mortal nature subject to entropy <and> united the impassible with the passible, rendering it impassible, the immortal with the mortal, rendering the mortal immortal, uniting [Himself] with our humanity impassibly.'*

Է. Եթէ որ ոչ ասիցէ զմարմինն¹⁷⁹ տէրունական, չարչարելի և մահկանացու ըստ բնութեան, և անչարչարելի և անմահ ըստ աստուածութեանն՝¹⁸⁰ <>¹⁸¹ միաւորութեան, այլ ասիցէ ըստ բնութեան անչարչարելի և անմահ, և կամ ըստ անճառ միաւորութեան չարչարելի և մահկանացու՝ նզովեալ էղիցի:

7. Arm 'If anyone does not affirm the Lord's flesh as passible and mortal according to its nature and impassible and immortal according to its union with the <> divinity, but affirms that it is impassible and immortal according to its nature or that it is passible and mortal according to the ineffable union, let him be anathema.'

7. Syr 'Everyone that does not confess that Christ's real body is passible and mortal according to nature, while it is impassible and immortal as God, but states that it is passible and mortal in the divine nature or impassible and immortal in the human nature, let him be anathema.'

Synodal Tome: 'We confess that the same God the Word . . . truly suffered and died in a passible flesh . . . He rose on the third day in the body born of the Virgin for impassibility and immortality . . .'

The seventh anathema draws the logical conclusions from the preceding, applying to the spheres of passibility and immortality the results of the discussion of incorruptibility. As such, the unit exhibits the viewpoint of *Ōjnec'i* and *Xosrovik* that the Word assumed passible, mortal flesh but through uniting it with His divinity rendered it impassible and immortal by preserving His humanity from sin and therefore from its consequences in submitting to the reprehensible passions that culminate in physical death.¹⁸² This perspective is also well expressed in the section cited from *Ōjnec'i's Canon*. As a result, the heresy first targeted in the second part of the formulation is that of *Philoxenus of Mabbug* and *Yovhannēs Mayraṇanec'i* who argued that Christ's nature is divine and that His virgin birth removes Him from the impact of passion of any kind, so that his hunger or tiredness were more appearance than reality¹⁸³. Similarly, *Julian* averred that Christ's flesh was incorrupt, impassible, and immortal as it was prelapsarian. Meanwhile, one might contend that the second view to be rejected, that referring to Christ's flesh as passible and mortal in the union, is that of *Severus*, in that, as in the previous discussion of incorruption, the latter maintained that Christ's human nature is corruptible, mortal, and passible, becoming impassible and immortal only after the resurrection, as expressed also in the Synodal Tome, which obviously represents his views on this issue.¹⁸⁴ *Severus* lacks any treatment of the interrelation of Christ's humanity and divinity in the union and hence manifests no parallel to the insights of *Ōjnec'i* and *Xosrovik*.

In light of this the Syriac version contains no mention of the contrast between Christ's humanity regarded in distinction as opposed to its role in the context of the union and therefore rephrases the formulation to clarify the antithetical characteristics inherent in the humanity and divinity. Ultimately, this too impugns a Julianist anthropology that denies Christ's flesh is passible and mortal as noted above.

H) Synodal Tome: 'We confess that the same God the Word performed the miracles as God and underwent human requisites as man, for He is both perfect God and perfect man. God the Word incarnate bore everything human like unto us except for sin. . . . He truly suffered and died in a passible flesh, who was by His nature above passions as God.'

ը. Եթէ որ ոչ ասիցէ զՔրիստոս մարմնով կրեալ զամենայն կիրս մարդկայինս առանց մեղաց, այլ ըստ աստուածութեանն զնա¹⁸⁵ անկեալ ընդ

¹⁷⁷ Cowe 2004: 47.

¹⁷⁸ Cowe 2004: 37-38.

¹⁷⁹ -մին ed princ.

¹⁸⁰ -թեան ed princ.

¹⁸¹ + բանն M1869 edd.

¹⁸² Cowe 2004: 47-48.

¹⁸³ Cowe 2004: 42.

¹⁸⁴ Cowe 2004: 35-36.

¹⁸⁵ զնայ M1869

կրիւք՝ և կամ անհաղորդ լեալ զնա¹⁸⁶ մարդկային կրից ըստ տնաւթնութեանն՝¹⁸⁷ նգովեալ եղիցի:

8. 'If anyone does not affirm that Christ bore all His human passions in the flesh without sin, but rather that He submitted to passions according to His divinity, or that He did not participate in human passions according to the economy, let him be anathema.'

8. Syr 'Everyone that does not confess that Christ bore all human passions in His human body, except for sin, but states that the divinity was subjected to passions, or maintains that His body did not participate in human passions, **but states that a corruptible body had suffered them**, let him be anathema.'

This anathema is dedicated to Christ's consubstantiality with us in His humanity in that He underwent all facets of the human condition not associated with the impact of sin, and it rejects any attempt to impute passibility to the divinity. Though the topic is not discussed in Ōjneg'i's Canon, it features significantly in his work against the Phantasiasts as well as in the Tome, which offers a powerful articulation of the doctrine. The contrasting perspective of imputing the passions to the divinity clearly inveighs against Philoxenus and Mayragomec'i who both affirmed that Christ's nature was divine and that He submitted to passions by His volition, not as a condition of being enfleshed, Mayragomec'i going even further to argue for the mere appearance of His suffering and weakness.¹⁸⁸ Similarly, the Phantasiast with whom Ōjneg'i contended denied that Christ had suffered passions in the flesh, but underwent them 'after the fashion of God.'¹⁸⁹

The Syriac version follows the Armenian fairly closely in the first part of the anathema, but adds a third clause condemning those who argue a corruptible body suffered the passions. Here the addressees of the ban are presumably Nestorians who maintain a loose sense of association between the two natures in such a way that the human nature, sometimes referred to as 'the man' and thereby depicted almost as a second agent, would be perceived as the bearer of all facets of Christ's human life. Obviously, the Nestorian community would have continued to present a much more potent challenge to the West Syrian community in this era than to the Armenians.

1) Ōjneg'i's Canon §22: '... we confess one nature of the Word and the flesh, perfect God and perfect man, and conjoined indivisibly with a distinct united nature and unconfused union, the inoriginate with the originate, the Word with the body... 26. we confess all the more the union of divinity and

humanity inseparably according to His teaching. 33. Behold, word, spirit, and life, and man and the Son of God united, teaching us that He is true God...'

Synodal Tome: 'We believe that God the Word, the only Son of the Father, descended and rested in the chaste womb of the holy Virgin Mary and that he fashioned himself as perfect man from her... And because He is God the Word, that is of His Father, He was able to be conceived in the Virgin's womb and be born without breaking the seal of her virginity, and because of that she is and ought to be called 'Mother of God', because the One who was born of her is truly God, who united Himself hypostatically with the flesh and became man. The selfsame is both divinely and humanly one single Son, a single Savior... for He is both perfect God and perfect man. God the Word incarnate bore everything human like unto us except for sin...'

թ. Եթէ որ ոչ խոստովանեցի զՔրիստոս՝ յետ անճառ տնաւթնութեանն¹⁹⁰ հաւասար հաւր¹⁹¹ և հոգւոյն¹⁹² Աստուած ճշմարիտ, նոյնպէս կատարեալ և ճշմարիտ մարդ հաւասար մօր և մեզ *բայց ի՝¹⁹³ մեղաց՝ նգովեալ եղիցի:

9. 'If anyone does not confess Christ after the ineffable economy as true God, equal to the Father and the Spirit [and] likewise perfect and true man equal to His mother and us, except for sin, let him be anathema.'

[There is no equivalent anathema in the Syriac version]

In affirming Christ's double consubstantiality with the other persons of the Trinity as God and with the Virgin Mary and us in His full humanity the ninth anathema constitutes the summation of several of the earlier units, the Trinity in the first, the reality of the incarnation in the second, and the delineation of Christ's human nature as corruptible in the sixth and passible and mortal in the seventh. Perhaps it is for this reason that it finds no equivalent in the Syriac version, if its absence there is not to be accounted for by an error in scribal copying, since the opening and closing formulae are common to numbers 6-9. In contrast, both Ōjneg'i's Canon and the Synodal Tome provide ample illustration of the importance accorded these issues.

While the reference to the equality between the persons of the Trinity established at Nicaea and Constantinople is largely formal at this point with the demise of Arianism, the question of Christ's perfect manhood is undoubtedly aimed at combating the anthropology and understanding of the operation of sin upheld by Philoxenus, Julian, and Mayrauanec'i. All

¹⁸⁶ զնայ M1869

¹⁸⁷ տնօրէն. ed princ.

¹⁸⁸ Cowe 2004: 47.

¹⁸⁹ Cowe 2004: 45.

¹⁹⁰ տնօրէնութեան ed princ.

¹⁹¹ հօր ed princ.

¹⁹² հոգւոյն M1869

¹⁹³ բացի ed princ.

three had argued that the protoplast's transgression had introduced passibility and death to human nature in a condition transmitted by carnal union. Since they maintained the scriptural dogma of Christ's sinlessness and virgin birth, they deduced that the latter removed Him from mankind's postlapsarian lot. This, in turn, undermined His full consubstantiality with us, since, as already mentioned, Julian argued Christ's flesh was prelapsarian, while Philoxenus and Mayragomec'i outrightly denied Christ possessed a human nature, His one nature being divine, but now enfleshed.¹⁹⁴

J) Ōjnec'i's Canon §45 '... confessing a union of the divinity and manhood incorruptibly ...'

Synodal Tome: 'This is the faith we have received from the apostles and Fathers, in conformity with the teaching of the three councils, Nicaea, Constantinople, and Ephesus.'

ժ. Եթէ որ ոչ խոստովանեցի անապականաբար կրեալ Քրիստոսի զամենայն կիրս մարդկայինս կամաւ՝ այլ ապականութեամբ <ասէ>¹⁹⁵ նմա¹⁹⁶ զայսոսիկ, և կամ եթէ¹⁹⁷ զնոյն ինքն զկիրս ապականութիւն <դնէ>¹⁹⁸ նմա¹⁹⁹, և ոչ խոստովանի²⁰⁰ ըստ առաքելոցն և մարգարէիցն և ուղղափառ վարդապետաց խոստովանութեան՝ նզովեալ եղիցի:

10. 'If anyone does not confess that Christ incorruptibly bore all His human passions voluntarily, but **rather <affirms> that He [bore] them through corruption**, or<imputes> the same passions to Him as corruption, and does not confess according to the confession of the apostles and prophets and orthodox teachers, let him be anathema.'

9. Syr 'Everyone that does not confess that Christ underwent the passions incorruptibly, or views the passions as corruption other than in the sense employed by the prophets, apostles and orthodox Fathers, let him be anathema.'

The final Armenian anathema affirms the Word's agency in the incarnation and the corollaries of that confession in terms of His experiencing the innate characteristics of the human condition as God and hence 'incorruptibly' without enduring corruption deriving from sin and by definition the 'reproachable' passions attendant upon it. Since, therefore, He accepts the passions delineated as 'natural' (i.e. hunger, growth, ignorance, etc.) which are incumbent on humanity at large as part of His salvific mission in the economy He

participates in them not of necessity but 'voluntarily'. The conclusion argues that this formulation maintains continuity with the whole tradition of Salvation History extending from the Old and New Testaments into the life of the universal Church, as emphasized also in the Synodal Tome. Thus, alternative views must be regarded as unwarranted innovations with no foundation in the origins of normative Christian thought.

The reference to Christ's bearing the passions through corruption may apply to Severus' perspective on humanity mentioned above that corruption and death were integral to the human race from Creation onwards and not a result of the Fall. Since Adam's incorruptibility in paradise was not inherent but dependent on divine grace, which was removed after his transgression, so now Christ's human nature was affirmed to be corruptible, mortal, and passible.

The imputation of the passions as corruption clearly alludes to Mayravanec'i's less nuanced view of the subject, rejecting a distinction between the 'reproachable' passions associated with sin and the 'natural' elements innate in the human condition and regarding all human existence as tainted by corruption to such a degree that the heresiarch talks of Christ appearing 'in the likeness of human flesh' which he contrasts with the actual reality. Consequently, Christ only 'appears' to exhibit ignorance, fear, and other manifestations of humanity. Hence, as stated in the sixth section of the *Seal of Faith* manual produced in Phantasiast circles, not only are Christ's passions not compulsory, neither are they by empathy (կարեկցութեամբ), as He is above human nature, His one nature being divine.²⁰¹

If the second clause concerning bearing the passions 'through corruption' embraces Severus' teaching, it is understandable that it is absent from the Syriac version. Similarly, the third clause is adjusted to resemble its counterpart in the sixth anathema. There the focus is directed to Christ's flesh, whereas here to His agency, however in both cases the view anathematized relates to one outside the biblical and patristic tradition, which is clearly intended to include Severus, as Michael the Syrian reports on the conduct of the synod, and hence first and foremost that of his opponent Julian and Aphthartodocetist supporters.

10. Syr 'We anathematize all the heresies and their originators, such and such. We accept the holy Fathers.'

[There is no equivalent anathema in the Armenian version]

As mentioned above, this Syriac anathema diverges from the formal pattern of the *anathemata* as well as

¹⁹⁴ Cowe 2004: 36–46.

¹⁹⁵ ասէն M1869 edd. : ditt.

¹⁹⁶ նմայ M1869

¹⁹⁷ թէ ed princ.

¹⁹⁸ դնէն M1869 edd. : ditt. The final ն in M1869 seems added in lighter ink, suggesting the reading was singular, as required grammatically.

¹⁹⁹ նմայ M1869

²⁰⁰ M1869 prim. man. : -նին M1869 corr edd.

²⁰¹ Knik' hawato'y, 1914: 256.

the theological structure in that it is of general import, not specific to the issues discussed at the synod. Consequently, it appears to have been created primarily to arrive at the symbolic number ten implying completeness and perfection.

Conclusions

Taken individually, the Synod of Manazkert was a resounding success for Ȫjnec'i, building on his achievements in compiling the dossier of Armenia's doctrinal and liturgical and canonical texts in the Book of Letters and Book of Canons respectively. In many ways it represented the pinnacle of his period of office, revisiting in a more comprehensive and profound manner issues broached seven years previously at Duin, uniting all the Armenian clergy behind him in the process and extending this union to embrace the West Syrian Church in an unprecedented display of solidarity, the memory of which was transmitted in the annals of their ecclesiastical history where he is commemorated 'as an angel because of his sanctity.'²⁰² It was a grand gesture, after which the catholicos retired to his home area of Ȫjun where he was laid to rest some two years later.

Granted the emphases he accords the conclave in his Canon, now accessible in a more accurate form revealing its authenticity as a witness to the events under discussion, it is likely that Ȫjnec'i had been planning a gathering of this magnitude to deal more effectively with the prevailing liturgical confusion now that Greater Armenia was free for a period from Byzantine incursions and the imposition of Chalcedonian norms that accompanied them. Whereas the synod of Duin had treated such practices from a purely ritual perspective as isolated topics embedded in a range of matters of lesser import, now the prime issues were highlighted and interconnected and interpreted not merely as aspects of ecclesiastical tradition but as integrated reflections of the core beliefs of the Armenian Church, contrasting the themes of unity and duality that had earlier distinguished Armenian theology from Zoroastrianism and Nestorianism and were now being applied to Chalcedon.²⁰³ This was the simplification and clarification Ȫjnec'i refers to in the Canon as an absolute necessity to inform the message the clergy had now to disseminate to their flock as part of his campaign to ensure greater uniformity of dogma and liturgical practice.²⁰⁴

As the parallel antithesis between the perspectives of Christ's flesh being incorruptible or corruptible was also perceived as a central point at issue with

Chalcedon, since the latter was viewed as undermining the interrelation between divinity and humanity in the union of natures so crucial for Armenian theology, it helps explain why the catholicos would have been so open to pursuing the mutual charges of Julianism and Severian corruptibility raised on the margins of the Armenian polity, that allowed him to broaden the scale of his proposed conclave to include Syrian co-religionists who followed a similar miaphysite creed and would therefore be predisposed to join in condemning the Chalcedonian formula. In addition to the latter, the Syrians also achieved the banning of the monk Gabriel, who had brought the charge against them, as a Julianist heretic.

However, that discussion inevitably exposed the dichotomy between the Armenians and Syrians over the interpretation and application of corruption terminology to Christ, which, in turn, might have derailed the conclave, but for Ȫjnec'i's pragmatic intervention to curtail the dispute and refocus on areas of mutual agreement. Nevertheless, the idyllic image he conjures of the Syrians departing in peace and glorifying God at the conclusion of the synod did not last long. As our textual comparison indicates, they altered the Synodal Tome and the form of the anathemata in order to defend the Severan positions impugned there.²⁰⁵ Moreover, we read that Athanasius, bishop of Maypherqat, who had apparently remained silent during the conclave, shared his misgivings with the Syrian patriarch, inaugurating a new exchange of letters with Ȫjnec'i and Xosrovik T'argmanič' to clarify further theological differences.²⁰⁶ In the long term, also, it cannot be said that the synod wrought a closer sense of rapport or cooperation between the ecclesiastical polities, which continued to witness periodic examples of Syrian treatises condemning Armenian dogma and practice up to the 12th century that required Armenian response.²⁰⁷

The longer term Armenian perspective of the synod has patently viewed it primarily in relation to Chalcedon. This is manifest from the insertion of Ȫjnec'i's Canon in the Book of Letters, while the Synodal Tome appears to have been completely lost apart from the catholicos' citations, and the *anathemata* have experienced a precarious transmission as a separate element that apparently randomly found its way into certain miscellany manuscripts so that the Syriac version is needed to restore several of its pristine readings.

²⁰² Michael the Syrian, vol. I: 461, vol. II: 496.

²⁰³ Cowe 1997: 350-55.

²⁰⁴ Ȫjnec'i, *Matenagirk' Hayoc'*, vol. 7, 2007: 127.

²⁰⁵ These findings require a revision of earlier estimations of the nature of the Syriac evidence on the synod, as well as the view that Julianism represented the Armenian doctrinal norm in the 7th-8th centuries, on both of which, see Ter-Minassiantz 1904: 178-197.

²⁰⁶ Xosrovik T'argmanič', 1903: 97-183.

²⁰⁷ The last of these was penned by the famous commentator and polemicist Dionysius bar Šalibi, for which see Mingana 1931.

Clearly, the West Syrian Church and its Severian Christology never posed the major threat to Armenian Christianity that Byzantine Chalcedonian orthodoxy did, a fact reflected in the practices of Armenian monastic scriptoria.

The united miaphysite position proclaimed by the Armenians and Syrians at Manazkert would certainly have generated some resonance in Byzantium.²⁰⁸ The assault's impact may have been heightened by the contemporary military situation in which Leo III's accession was marked by the second Muslim siege on Constantinople, followed by the resumption of annual plundering raids into Byzantine Anatolia, the tenor of which had recently been intensified by the new caliph Hisham (r. 723-43). These setbacks had engendered a sense of malaise and loss of divine favor, which the emperor was seeking to avert by an attempt to convert the Jews (722) and an edict promulgated in the same year (726) condemning the use of icons. More broadly, the stabilizing of a border between the two political spheres, which remained fairly stable up to the mid-9th century provided the Armenians the opportunity to consolidate Ȫjnec'i's reforms before the inauguration of the next phase of doctrinal and military interchange.²⁰⁹

The joint Armeno-Syrian repudiation of the Chalcedonian theology that had become standard in Byzantium with the condemnation of *monoergism* and *monothelitism* at the Third Council of Constantinople in 681 would have been welcomed by the Umayyad government, which, as indicated above, had only recently concluded an attempt to take its capital and was currently engaged in settling borders, while still prosecuting more localized ideologically inspired attacks against their enemy. The Armenian revolt of 703 brought to an end its relative autonomy, precipitating an administrative overhaul that incorporated the territory within the new province of *al-Armīniya* that comprised all Southern Caucasia. The latter was now under the overall authority of an *ostikan* (governor) to which the chief Armenian prince was subject. This process led to Greater Armenia's more thorough integration into the Umayyad state that was manifested more concretely by a census²¹⁰ in c. 725 that issued in an increase in taxation. Meanwhile, the Armenian aristocracy was drafted to the eastern front to fight the Khazars. Granted Greater Armenia's limitrophe position and recurring tendencies to appeal to Byzantine intervention to help settle their grievances, this sort of theological proclamation at which a state official may have been present²¹¹ was probably calculated on some level as an expression of

loyalty and allegiance. Symbolically, it would not have gone unnoticed that the synod's miaphysite creed and repeated injunctions against introducing any form of division or separation in the incarnation was in perfect accord with the Muslim prohibition against *širk* by introducing duality into the divine realm.²¹²

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²⁰⁸ For a reductionist view of Ȫjnec'i's doctrinal concerns, subordinating them to matters of international politics, see Papyan 1995: 98.

²⁰⁹ Cowe 2004: 49.

²¹⁰ See Papyan 1995: 106.

²¹¹ See Michael the Syrian, vol. II, 1901: 498.

²¹² Cowe 2004: 33-34.

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A Note on the ‘Great King of Armenia’

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Abstract: This essay discusses the importance and significance of the title *wazurg šāh Arminān* in light of the recent finds from Bactria. While discussing the meaning and historical significance of this title for Armenia and the Sasanian Empire, it is argued that the newly found Bactrian sources should change our ideas about its significance. From the newly found Bactrian material, the title of *oazarko košanošao* matches that of *wazurg šāh Arminān*, which may mean that Armenia and Bactria were the two important fronts for the Sasanians. Furthermore, this significant position for Armenia, Bactria and the title may be due to dynastic connections between those who held this title and the Sasanian king of kings.

Keywords: *wazurg šāh Arminān*, *oazarko košanošao*, Paikuli, Armenia, Kušān, Bactrian, Artaxiads, Great King

In the inscription of Šāpūr I at Ka‘be-ye Zardošt (ŠKZ), his son Ohrmazd-Ardaxšīr is given the title of *wazurg šāh Arminān*.¹ Ohrmazd-Ardaxšīr’s brother, Narseh under Šāpūr I had been given a wide expanse of territory as mentioned in the ŠKZ: *Ēr mazdēšn Narseh šāh Hind, Sagestān ud Tūrestān tā zrēh danb* ‘Iranian Mazda-worshipper, Narseh king of India, Sīstān and Tūrān to the side of the sea.’² It has been shown that although Ohrmazd-Ardaxšīr was the youngest son of Šāpūr, because of his bravery (his title in MP *nēw*), he became king of kings and inherited the throne from his father.³ Apparently, the position of King of Armenia was next to the King of Kings, and in line for the throne. This interrelation between Armenia and Iran since the Arsacid times, we learn from Agathangelos.⁴

By 293 CE Narseh had held the title of *wazurg šāh Arminān*,⁵ but what this title meant and suggested to be is something that must be discussed in light of the new Bactrian material that has come to light in recent times. In honour of my colleague, Gregory Areshian, I would like to discuss the significance of this title in the context of the history of late antiquity and the importance of looking at the development of such titles from the Caucasus to the Greater Khurāsān. Areshian himself has already touched upon the importance of Armenia for the Iranian world, specifically its unique position during the Arsacid and the Sasanian period, and I intend to discuss the matter a bit further.⁶

In Narseh’s Paikuli inscription we do come across the title as *Arminān šāh* ‘king of Armenia,’⁷ but P. O. Skjærvø reconstructs the title as *wazurg šāh Arminān*.⁸

W. B. Henning had translated this title as ‘King of Great Armenia,’⁹ giving Armenia a territorial grandeur which may harken back to the time of the Artaxiads. But based on the Greek version of the ŠKZ (41) *του μεγάλου βασιλέως Ἀρμενίας*,¹⁰ and other evidence it makes sense to translate the title as the ‘Great King of Armenia.’¹¹ This means that the greatness is not the designation of the territory, but rather the status of the king. Thus, the title of the ‘Great King,’ of Armenia, meant that this king was only second to that of the ‘King of Kings,’ harkening back to the earlier title which existed in the Artaxiad period, before the time of Tigran the Great.¹² However, we should remember that this title is not only based on the Hellenistic tradition, but is even older as an Old Persian title of *xšāyaθiya vazrka* ‘great king,’ from the time of Darius I.¹³

We must turn to the new data that has appeared in the Eastern Iranian world, namely the Bactrian seals and coins which shed light on the question of the importance of Armenia and the title attached to it in the royal inscriptions of Šāpūr I and Narseh. The recent publication of Aman ur Rahman’s Bactrian seals has given us a new understanding of the development of the Eastern Iranian world vis-à-vis the Sasanian Empire. This material is especially important in the light of the many unknown aspects of Kushano-Sasanian and Kushan Empire history. In the collection we are now able to view significant connections and titles for the king of Huns, Kušāns and others who ruled the East. For example a seal impression [AA 2.2 (Hc009)] provides in Bactrian the title of *oa(z)-arko ko(šanoš)[ao]*, the ‘great Kušān-šāh’ (Figure 1).¹⁴

¹ Huyse 1999: 37, 50 and commentary, vol. 2: 108-109.

² ŠKZ 23-24. For the significance of *Ērmazdēšn* see Gnoli 1987: 83-100.

³ Shayegan 2012, <http://www.iranicaonline.org/articles/hormozd-i>.

⁴ Agathangelos 1976: 30, 47.

⁵ Humbach and Skjærvø 1983, 3.2: 11.

⁶ Areshian 2013: 151.

⁷ Humbach and Skjærvø 1983, 3.1: 45 (Paikuli 2 and 19).

⁸ Humbach and Skjærvø 1983, 3.2: 24.

⁹ Henning 1952: 517.

¹⁰ ŠKZ 41, Humbach and Skjærvø 1983, 3.2: 24.

¹¹ Chaumont 1968: 81; Lang 1983: 517; Russell 1987: 124.

¹² Bedoukian 1978: 46; Russell 1987: 84.

¹³ Schmitt 1991: 49 (DB 1). I thank M. R. Shayegan for the mention of the Old Persian tradition.

¹⁴ Lerner and Sims-Williams 2011: 73. The title in the textual sources was first noticed by J. Marquart (1895: 659f.).



Figure 1. Seal impression AA 2.2 (Courtesy of OAW)

More interestingly, the new numismatic evidence from Kušān and Kušāno-Sasanian world brings to question the importance of the title of the ‘Great King of Armenia.’ For example, the Kushano-Sasanian gold issue of king Peroz I, which according to the dating of the authors coincides with 245-270 CE, has the following legend: ΠΙΡΩΖΟ ΟΟΖΟΡΚΟ ΚΟΒΑΝΟΒΑΥΟ, which the editors of the book curiously read as ‘Peroz the great, Kushan king.’¹⁵ However, with their study of the copper coinage from the Kushano-Sasanian realm, they translated the very same title in Middle Persian: *wazurg Kušān šāh* as the ‘great Kushan king’ (Figure 2).¹⁶

Thus, on one side we have the title of the ‘Great King of Armenia,’ which is thought to be an old tradition, and on the eastern side the title of the ‘Great King of Kušān.’ One might surmise that the designation of ‘great,’ in itself does not signal a special importance that Armenia held vis-à-vis the Iranian world, as the title also existed in Eastern Iran. If one reads Agathangelos carefully, the role of the Armenians in Eastern Iran is clearly emphasized, so might it be that this title was carried to the east from the Caucasus? With the problem of the Kušān chronology at hand it is very difficult to state the exact date in which the title of ‘Great Kušān-šāh’ was put into effect. However, what is clear is that both in Armenia and in Bactria, the Arsacids and the Sasanians had forged ties with the noble families and had dynastic connections.¹⁷ The bestowing of such a title on the two important fronts on kings and the dynastic connections was perhaps a way to forge deep ties, so to control the two flanks of the empire, one in the Caucasus and the other in Greater Khurāsān.

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¹⁵ Jongeward and Cribb 2015: 205.

¹⁶ See the review by Kh. Rezakhani (2017: 63–64).

¹⁷ For the Sasanian connections to the East, see Olbrycht 2016: 23–35.



Figure 2. Copper Coin of Ardashīr (Courtesy of the ANS)

Rezakhani, Kh. 2017. Review of: Jongeward, D. and Cribb, J. with Donovan, P. 2015. *Kushan, Kushano-Sasanian, and Kidarite Coins: A Catalogue of Coins From the American Numismatic Society*. New York. *DABIR* 3: 61–65.

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The Study of East Asian Art History in Europe: Some Observations on Its Early Stages

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Abstract: Reflections are offered on how East Asian art history was established as a field of study in European academia. Concentrating on Germany (especially Berlin), the early stages of this process from the late 19th century to the post-World War I period are traced and the main protagonists and institutions briefly characterized. The paper ends with a short polemic about the impending reorganization of the East Asian collections within the Berlin State Museums, which risks losing much of the hard-won intellectual gains made in more than one century of serious scholarship and institution-building.

Keywords: East Asian art history; Philology; Japonisme; European Modernism; the Humboldt brothers; Friedrich Hirth (1845-1927); Ernst Grosse (1862-1927); Otto Kummel (1874-1952); Museum für Ostasiatische Kunst Köln; Ostasiatische Kunstsammlungen Berlin.

I

In 1829, Johann Wolfgang von Goethe (1749-1832) penned the following oft-quoted maxim:

‘Chinese, Indian, Egyptian antiquities are always mere curiosities; it is very well to acquaint oneself and the world with them – but they will contribute little of consequence to our moral and esthetic edification.’¹

Such a patronizing assessment of the material products of non-European civilizations may be assumed to have been fairly widespread in the early 19th century. But even then it was deeply questionable, and its basis of ignorance was being systematically eroded.² Following Wilhelm von Humboldt (1769-1835), who had placed philology at the centre of all scholarly inquiry in the Humanities and the Social Sciences, an unprecedented number of European intellectuals engaged in the intensive study of non-European languages. Thanks to their efforts, non-European literary masterworks were being integrated into an ever-expanding canon of ‘world literature’ – an effort in which none other than Goethe himself actively contributed, e.g., with his captivating paraphrases of Chinese poetry.³ Spurred by

progress in the philological disciplines, an analogous widening of interest took place, over the course of the 19th century, in the study of the visual arts. In the process, the artefacts of distant cultural traditions had become far more than mere curiosities, and they, too, took their place in the canon.

As an aside, it is curious that among the exotic arts appropriated by Western intellectuals since the early 19th century, music came last – an irony given the oft-repeated characterization of music as a ‘universal language’ necessitating no translation. Even today, the different historical time-depths of the absorption of exotic art forms into European culture are directly reflected in their institutional presence. East Asia is a case in point. Whereas East Asian languages and literatures have been widely taught in universities since the mid-19th century, instruction in East Asian art history and archaeology came considerably later and even today is offered only by a comparatively small number of institutions; East Asia-related ‘ethnomusicology’ remains even more marginal.

The present essay endeavors to investigate how East Asian art history came to be recognized as a legitimate field of study and eventually grew into a full-fledged academic discipline in the West.⁴ This still-ongoing process has been, to be sure, a highly complex one, involving the distinctive academic cultures of more than a dozen countries on three continents. Neither space nor the current state of my research permits a comprehensive treatment here. I shall merely present some *Lese Früchte* pertaining mostly to developments in the German-speaking countries of Europe through approximately the end of World War I, with some spillovers into later periods; in this way, I hope to add

*I am very grateful to Dr. Ching-Ling Wang for his helpful and timely corrections and suggestions. For the sake of economy, the references given in this article have been reduced, omitting information that can be easily cross-checked on the web or in *Neue Deutsche Biographie*. All translations are mine.

¹ ‘Chinesische, indische, ägyptische Altertümer sind immer nur Kuriositäten. Es ist sehr wohlgetan, sich und die Welt damit bekannt zu machen; zu sittlicher und ästhetischer Bildung aber werden sie uns wenig fruchten.’ The maxim is included both in Goethe’s *Maximen und Reflexionen*, No. 763 (Goethe 1962, v. 9: 602) and in his *Wilhelm Meisters Wanderjahre* (Goethe 1962, v. 8: 516).

² For an overview of these developments, see Marchand 2009.

³ Goethe, ‘*Chinesisch-Deutsche Jahres- und Tageszeiten*’ (Goethe 1962, v. 2: 658-661). For discussion of Goethe’s perception of China, see, e.g., Mommsen 1985.

⁴ See also Falkenhausen, forthcoming (1), (2).

some facets to previous, likewise inevitably partial, studies.⁵ I dedicate these highly preliminary musings to my friend Gregory Areshian, whose broad learning across a wide spectrum of civilizations I greatly admire.

II

In its broader historical context, the 19th-century expansion of European scholarly interests was surely no accident. It was conditioned, no doubt, by economic processes that, since the 17th century, had linked all parts of the globe into a single economic system; and by advances in technologies of transportation that increasingly facilitated travel to distant places. The dark political undersides – the connections with European imperialist expansion and colonial exploitation – have been rightly emphasized in much recent scholarship, as have the asymmetries inherent in the relationships between the scholars and their (often unwitting and/or unwilling) subjects of study.⁶ It cannot be denied that the inclusion of East Asian visual cultures under the academic field of art history, as well, was in no small measure enabled by the large-scale looting – or the purchase at unfairly low prices – of artworks from distant places for the benefit of European museums and private collections; or that much early Western scholarship on East Asia was crudely triumphalist and/or racist in character.

But in a dialectic that should not be overlooked, there was also, from early on, an abiding tendency to conduct scholarship in explicit or implicit opposition to these now-discredited mindsets. Such an attitude is expressed, for instance, in the following famous statement by Wilhelm von Humboldt's younger brother, the celebrated polymath and explorer Alexander von Humboldt (1769-1859):

'In claiming the unity of humankind, we resist any unpleasant assumptions of the existence of higher and lower human races. To be sure, there are peoples or tribes who [in their present condition] are more amenable to education, more highly cultivated, and have been ennobled by intellectual culture; but there are no inherently nobler ones. All are equally destined to liberty; to a liberty that, under more primitive conditions, pertains by right to the individual, whereas in the life of states enjoying political institutions it pertains to the collective.'⁷

⁵ E.g., for Germany, Erdberg 1985; Goepper *et al.* 1977; Ledderose 1989; Schütte 2002: 75-87; Walravens 1983-85. The painstaking work of Hartmut Walravens, who has done more than anyone else to make accessible primary sources relevant to this type of research, deserves particular acknowledgment.

⁶ The literature in this line of research, inspired by the trailblazing work of Edward Said (1978), is too voluminous to enumerate here.

⁷ 'Indem wir die Einheit des Menschengeschlechts behaupten, widerstreben wir auch jeder unerfreulichen Annahme von höheren und niederen Menschenrassen. Es gibt bildsamere, höher gebildete,

The author goes on to cite approvingly his brother Wilhelm:

'If we are to designate an idea that is visible throughout all history in an evermore expanded validity; if any idea is to prove the often contested, but even more frequently misunderstood, ever-ongoing perfection of humankind as a whole: that idea is the idea of humanity itself. It entails the endeavour to lift any borders that hostile prejudices and all kinds of one-sided opinions have erected between humans; and the endeavour to treat all humankind as one large and closely related entity, without regard to religion, nation or skin-colour. Humankind must be treated as a totality that exists in order to reach one goal: the free development of its inherent vigour. This is what constitutes the final, utmost goal of all human sociability. The fundamental direction imposed upon humankind by its very nature is the indeterminate broadening of its existence.'⁸

The Humboldt brothers envisioned that the systematic, serious scholarly inquiry into the languages and cultures of distant groups of fellow human beings would contribute to the emancipation of humanity as a whole. They believed in the possibility of generating deep understanding across cultural divides, and they hoped for a world in which all peoples of the world with their different traditions would freely come together as equals into one harmonious, mutually comprehending whole. High-minded, utopian, and perhaps somewhat naïve as they are, such ideas – rooted in the European Enlightenment and linked to German philosophical idealism – were widely and sincerely held, and they gave meaning to the painstaking efforts of generations of scholars during the 19th and 20th centuries. They cannot be dismissed as a mere smokescreen to colonial or imperialist oppression. Albeit at times occluded by competing tendencies, this universalizing, liberating agenda has been, and remains today, an important motivating factor in European scholars' investigations

durch geistige Kultur veredelte, aber keine edleren Volksstämme. Alle sind gleichmäßig zur Freiheit bestimmt; zur Freiheit, welche in roheren Zuständen dem Einzelnen, in dem Staatenleben bei dem Genuß politischer Institutionen der Gesamtheit als Berechtigung zukommt' (A. v. Humboldt 1845-62, v. 1: 385).

⁸ 'Wenn wir eine Idee bezeichnen wollen, die durch die ganze Geschichte hindurch in immer mehr erweiterter Geltung sichtbar ist; wenn irgendeine die vielfach bestrittene, aber noch vielfacher missverstandene Vervollkommenung des ganzen Geschlechtes beweist: so ist es die Idee der Menschheit, das Bestreben, die Grenzen, welche Vorurteile und einseitige Ansichten aller Art feindselig zwischen die Menschen gestellt, aufzuheben; und die gesamte Menschheit ohne Rücksicht auf Religion, Nation und Farbe als einen großen, nahe verbrüdernten Stamm, als ein zur Erreichung eines Zweckes, der freien Entwicklung innerer Kraft, bestehendes Ganzes zu behandeln. Es ist dies das letzte, äußere Ziel der Geselligkeit und zugleich die durch seine Natur selbst in ihn gelegte Richtung des Menschen auf unbestimmte Erweiterung seines Daseins' (ibid.; originally published in W. v. Humboldt 1836-38, v. 3: 426).

into non-European cultures; the study of East Asian art history is no exception.

Since the Humboldt brothers' vision was closely linked institutionally to the German university system of the 19th and early 20th centuries, it is probably no accident that Germany became an indispensable – albeit by no means the only – breeding ground for the pursuit of solid scholarship into non-European cultures. Emphasizing the need for arduous language-learning as a *conditio sine qua non*, such scholarship defined itself in stark contrast to any form of dilettantism, exoticizing, or connoisseurial approach to non-European materials. One would think that East Asian art history – linked as it is to a rich and complex textual tradition – ought to have appeared particularly congenial to investigations conducted under such intellectual premises. Historically, however, this type of scholarship was slow to develop, even in Germany, and it took some time to detach itself, on the one hand, from a dry classificatory approach that reduced works of art together with all other material-culture products to mere ethnographic specimens; and, on the other hand, from precisely the type of shallow exoticism that was anathema to any self-respecting scholar embracing the Humboldtian paradigm.

III

After the opening of Japan in 1853, the influx of large amounts of Japanese arts-and-crafts objects into Europe generated a wave of esthetic fascination with the exotic East. In Paris under the Second Empire and the early Third Republic, and to a lesser extent in other European cultural centres, this 'Japonisme' brought about many-faceted cross-fertilizations in all fields of the visual arts, which reverberated well into the 20th century.⁹ But in most cases the appropriation of East Asian motifs remained very much at the surface; it was even self-consciously exoticist, revelling in the alleged incomprehensibility of its source of inspiration. Hence, in spite of the ever increasing amounts of reliable information on East Asia that were becoming available, 19th-century Japonisme was, for all its pervasiveness, not immediately conducive to the in-depth engagement with East Asian cultures (let alone languages). In its impact, it rather resembled the similarly pervasive – and, from a cultural-historical point of view, altogether superficial – 18th-century fashion of Chinoiserie (which, one suspects, may have been on Goethe's mind when he wrote his above-quoted maxim).

From the 1870s onward, the widespread passion of collecting East Asian art objects gave rise to a

considerable body of connoisseurial literature.¹⁰ Over time, efforts were made to present the material then in European collections in an evermore systematic, historically-arranged fashion. In 1883, the art journalist and collector Louis Gonse (1846-1921) collaborated with the Japanese art dealer Hayashi Tadamasa 林忠正 (1853-1906), who had set up shop in Paris in 1878, to publish a massive two-volume work entitled *L'art japonais*, which is often referred to as the first monographic survey of any subfield of East Asian art history.¹¹ But rather than explaining Japanese art in its cultural contexts, that book was unabashedly connoisseurial; tellingly, it was soon translated into Japanese in order to guide the production of knick-knacks for the French market. Even thinner in all respects was the (apparently) first monographic work on Chinese art, *L'art chinois*, published in 1887 by the writer-diplomat Maurice Paléologue (1859-1944).¹²

As far as I am aware, none of the Europeans publishing on East Asian art before ca. 1900 knew any East Asian languages; even their purely esthetic connoisseurship appears, in today's perspective, embarrassingly poor, as attested by the often low-quality objects depicted in their works. But that early literature still had some relevance to the development of East Asian art history as an academic discipline: for it helped establish in the contemporary intellectual consciousness the notion that East Asian material culture – or at least some manifestations thereof – constituted legitimate 'art' in the same sense as European art. Of course, this realization by itself was not enough. What was still needed in order to begin separating the wheat from the chaff was the serious intellectual engagement with the indigenous East Asian traditions of esthetic theory and artistic practice; this would necessitate moving away from purely visual appreciation to an investigation of wider cultural contexts. The language barrier obviously constituted a major hurdle.

As far as I know, the first scholar to realize this *problématique* was the German sinologist Friedrich Hirth (1845-1927), who had become interested in Chinese painting while working in the employ of China's Imperial Maritime Customs Service. Sometime in the 1880s, Hirth conceived the idea of writing a history of Chinese art, which, if realized, would have been the first systematic attempt at a synthesis of the visual and material culture of an East Asian country informed by the study of pertinent primary textual sources. True to his roots in the Humboldtian university, Hirth took it

⁹ This was well documented by an influential exhibition at the Musée d'Orsay in 1988; for the catalogue, see Lacambre 1988. See also Croissant and Ledderose 1993.

¹⁰ See Chang 2013; Koyama-Richard 2001.

¹¹ Gonse 1883. For a critical historical assessment and further bibliography, see Labrusse 2008. Labrusse points out that in fact there had been some earlier monographs on East Asian art history-related subjects, which, however, were of much more limited scope and influence.

¹² Paléologue 1887.

for granted that knowledge of the Chinese language was indispensable to this endeavour. Remarkably, however, he also sensed that his own philological prowess would not be sufficient: mastery of the methods of art history – i.e., the then relatively new academic field of art history as practiced at European universities – would be equally essential if the aim was to produce a treatment of Chinese art that would be intellectually on a par with contemporaneous works on European art.¹³ Such a conception of the dual nature of the task at hand constituted, at the time, a significant intellectual breakthrough.

Referring to himself in the third person, Hirth wrote:

‘How much the cooperation of non-Sinological experts would have been needed in such an endeavour became especially clear to him in his interactions with practicing artists, whose judgment when viewing Chinese paintings often articulated the contrary of what he had been thinking himself. Among these artists there was in particular his friend and former housemate Professor Karl Gussow, who, in contemplating Chinese masterworks, taught him various perceptions that deviated completely from conventional ideas.¹⁴’

He therefore planned to collaborate with his son Herbert, an art historian. But Herbert Hirth died prematurely, and the project never came to fruition. Later in his career, Friedrich Hirth did produce some pioneering translations of Chinese art-related texts,¹⁵ but he self-consciously refrained from venturing into visual or aesthetic analysis. These works – like the surveys and catalogues put together by Hirth’s British contemporaries, the diplomat Herbert Giles (1845–1935)¹⁶ and the physician Stephen W. Bushell (1844–1908),¹⁷ both distinguished Sinologists with many years of experience in China – could serve as reference to the emerging discipline of East Asian art history, but they did not themselves constitute art-historical scholarship.

IV

Around the turn of the 20th century, change was in the air. Intellectuals throughout Europe felt increasingly dissatisfied with the certainties of the Victorian age. Reminiscing on his youth in turn-of-the-century

Vienna, Stefan Zweig (1881–1942) caught the pulse of the times when he observed:

‘Youth, like certain animals, possesses an excellent instinct for atmospheric reversals. Thus our generation sensed – long before our teachers and the universities became aware of it – that, as the old century was nearing its end, commonly accepted ideas about art were ending as well: that a revolution or at least a revaluation of values was about to begin. We felt the good and solid masters from the time of our fathers – Gottfried Keller [1819–1890] in literature, [Henrik] Ibsen [1828–1906] in drama, Johannes Brahms [1833–1897] in music, [Wilhelm] Leibl [1844–1900] in painting, Eduard von Hartmann [1842–1906] in philosophy – to be wholly replete with the complacency of a world of certainty. In spite of their technical and intellectual mastery they were no longer of interest to us. We instinctively felt that their cool, well-tempered rhythm was alien to that of our agitated temper and out of synch with the accelerated speed of our time.¹⁸’

The professionalization of East Asian art history was part of a more general academic response to such yearnings. Members of Zweig’s generation increasingly turned to extra-European civilizations as sources of new forms of wisdom, and as they did so they expected more than merely to be made to wallow in incomprehensible mysteries. Inasmuch as East Asian art history is concerned, fully trained art historians were now immersing themselves more and more deeply in that subject, even in some cases studying relevant languages. In due course they were able to produce a body of well-informed surveys of various aspects of East Asian art that stood head over shoulders above their predecessors. Thanks to the strength of the still-dominant Humboldtian system, this trend was particularly vigorous in Germany, where, during the decade or so preceding the outbreak of World War I, a community of competent specialists in East Asian art history emerged for the first time.

¹³ Hirth 1921: xxvii, xxxi.

¹⁴ Hirth 1921: xxxi. Gussow (1843–1907) was an academic painter practicing a highly-polished realist style. One cannot help wondering how he reacted to Chinese works of pictorial art. For glimpses into Hirth’s own collecting practice, see Furth, forthcoming.

¹⁵ These works are listed in Hirth 1921: lv–lvi.

¹⁶ Giles 1905. This work is, essentially, an uncritical collation of translated snippets from classical texts.

¹⁷ E.g., Bushell 1905–06; 1908.

¹⁸ ‘Jugend besitzt wie gewisse Tiere einen ausgezeichneten Instinkt für Witterungsumschläge, und so spürte unsere Generation, ehe es unsere Lehrer und die Universitäten wußten, daß mit dem alten Jahrhundert auch in den Kunstanschauungen etwas zu Ende ging, daß eine Revolution oder zumindest eine Umwertung der Werte im Anbeginn war. Die guten soliden Meister aus der Zeit unserer Väter—Gottfried Keller in der Literatur, Ibsen in der Dramatik, Johannes Brahms in der Musik, Leibl in der Malerei, Eduard von Hartmann in der Philosophie—hatten für unser Gefühl die ganze Bedächtigkeit der Welt der Sicherheit in sich; trotz ihrer technischen, ihrer geistigen Meisterschaft interessierten sie uns nicht mehr. Instinktiv fühlten wir, daß ihr kühler, wohltemperierter Rhythmus fremd war dem unseres unruhigen Bluts und auch schon nicht mehr im Einklang mit dem beschleunigten Tempo der Zeit’ (Zweig [1942] 1952, 50). For more on Zweig’s intellectual-historical context of Vienna see Schorske 1979.

The oldest member of this community was the ethnographer Ernst Grosse (or Große, 1862-1927)¹⁹ at the University of Freiburg, who had come to East Asian art through his interest in the origins of art. He helped his patroness Marie Meyer (1834-1915) to assemble a first-rate collection of East Asian artworks, which she eventually bequeathed to the East Asian Art Collection of the Royal Museums in Berlin (renamed the Berlin State Museums after World War I).²⁰ Though married to a Japanese woman, Grosse apparently did not have a working language of Japanese or of any other East Asian language; but in the many years he spent in Japan, he had been able to internalize indigenous esthetic values through extensive interaction with Japanese artists and connoisseurs. These views are reflected in his publications on East Asian art.²¹

The role of Japan as the principal arena of early Western engagement with the visual arts of East Asia – including not only Japanese, but also Chinese and Korean art – deserves a brief digression. Japan had already been salient in the age of Japonisme, and it continued to be essential as East Asian art history became an academic discipline in the West; only very gradually did China come into direct focus, whilst Korea, for various reasons, was not ‘discovered’ by Western art historians until much later. After the 1868 Meiji restoration, Japanese scholars were keen to define their country’s national identity in parallel to those of Western countries; like other facets of Japanese culture, the visual arts were instrumentalized for the purpose of manipulating Western views of Japan and its place in East Asia. Grosse was certainly not alone in developing a view of East Asian art history that was essentially modelled upon Japanese perceptions.

Parenthetically, Grosse was an exact contemporary of Okakura Kakuzō 岡倉覺三 (Tenshin 天心, 1862-1913), who more than anyone else was instrumental in establishing (European as well as East Asian) art history in Japanese academia and who, partly in collaboration with the Harvard-trained philosopher and museum curator Ernest Fenollosa (1853-1908), implanted an idiosyncratic – and, as it turned out, politically highly problematic – ‘Eastern’ aesthetics in the United States.²² I do not know whether Okakura and Grosse ever met, but Grosse was surely aware of the pioneering role played by the Boston Museum of Fine Arts, with which both Okamura and Fenollosa were associated, in bringing their Japan-cantered view

of East Asian art to an enthusiastic Western audience; he is also likely to have read carefully Fenollosa’s posthumously published *Epochs of Chinese and Japanese Art*,²³ which, though error-ridden and infuriatingly opinionated, stands as the earliest comprehensive synthesis of East Asian art history of enduring academic merit. An in-depth comparison of Okakura’s ideas with those independently developed under strong Japanese influence by Grosse and his younger German contemporaries should be a worthwhile topic for a future study. Such a study would bring out – more fully than I can do here – that the growth of East Asian art history into an academic discipline was truly a world-encompassing development, and one in which East Asia itself – or at least, during the period under discussion, one East Asian country – took an important part.

Another now-forgotten member of the 1860s generation in Germany who made important and, at the time, influential contributions to the development of East Asian art history was Oskar Münsterberg (1865-1920). Holder of a doctorate in economics from the University of Freiburg, Münsterberg was a wealthy industrialist who travelled around the world and built up a vast art collection. Over time, he developed considerable expertise in East Asian art, though, like Grosse, he never learned any East Asian languages. His three-volume history of Japanese art of 1904-07, as well as the two-volume history of Chinese art that followed in 1910-12, were methodologically innovative for attempting to base their historical narrative on the concept of style.²⁴ However, since Münsterberg’s analysis was couched entirely in the conceptual language of Western art history, the result was not very satisfactory. Unlike Grosse, Münsterberg does not seem to have associated with indigenous specialists.

Also worth a passing notice at this stage of our account are the publications on Japanese woodblock-printing by Woldemar Freiherr von Seidlitz (1850-1922), a Dresden-based government official, and by Julius Kurth (1870-1949), an evangelical pastor in Berlin. As is well-known, Japanese woodcuts were not considered ‘art’ in their country of origin, and their appreciation as an artistic genre originated in Europe. Though neither Seidlitz nor Kurth knew an East Asian language, their carefully researched, historically-minded books (complemented, in Kurth’s case, by a book on Chinese woodblock-printing) constituted a considerable improvement over the previous connoisseurial literature on the subject and served as standard reference for a generation.²⁵

¹⁹ Grosse’s background has been acribically researched by Mochii 2000; 2002; 2003. For his activities as an art historian, see Walravens and Kuwabara 2010: 13-97.

²⁰ Klose 2000; Veit 2000; 2009.

²¹ E.g., Grosse 1923; Kümmel and Grosse 1925.

²² See, e.g., Okakura 1903. Okakura’s art historical writings in Japanese (on both Western and Eastern art history) are collected in Okakura 1980.

²³ Fenollosa 1912. On its reception by German scholars, we have the following testimony by Hirth: ‘He had high esteem for Ernest F. Fenollosa as a connoisseur of Chinese paintings, although he did not agree with his views on many points’ (Hirth 1921: xxxvii).

²⁴ Münsterberg 1904-07; 1910-12.

²⁵ Kurth 1911; 1921; Seidlitz 1897.

V

The first scholar in Germany – and, probably, anywhere in the West – who managed to acquire a workable combination of art historical training and philological competence was Grosse's one-time protégé Otto Kümmel (1874–1952).²⁶ Originally trained as an expert on ancient Egypt, on which he wrote his dissertation at the University of Freiburg (1901), Kümmel came under the influence of Grosse, with whom he lived for several years after 1895.²⁷ It was presumably Grosse who encouraged Kümmel to study Chinese and Japanese in Bonn and Paris. Having worked in museum jobs in Hamburg, Berlin, and Freiburg, Kümmel returned to Berlin in 1906 at the invitation of the newly-appointed Director General of the Berlin Museums, Wilhelm von Bode (1845–1929). Except for service as a military officer in World War I, Kümmel spent the rest of his career in Berlin, where he built what was then one of the world's leading collections of East Asian art. From 1934 to 1945 he was to occupy the position of Director General of the Berlin State Museums concurrently with his positions as director of the Museum of Ethnography and head of the East Asian Art Collection.²⁸

Like Grosse (and, for some time, in Grosse's company), Kümmel spent considerable amounts of time in Japan during the pre-World War I period; his command of Japanese is said to have been excellent, and a Japan-centered perspective is pervasive in his publications on all aspects of East Asian art history.²⁹ Nevertheless, this work set new standards for research, and his achievements as a museum professional and a teacher were extremely impressive. With some justification, therefore, Kümmel is regarded as the founding hero of East Asian art history as a serious academic discipline in Germany and indeed in Europe.

Even so, current master narratives of the history of the field sometimes seem excessively Kümmel-centric. This is in part a consequence of Kümmel's own increasingly dictatorial behaviour,³⁰ compounded by later political developments that led to the eclipse of other members of Kümmel's generation who also made significant contributions to East Asian art history during the pre-World War I era and under the Weimar Republic. For the sake of a balanced account, mention should be made of at least three of them. Unlike Kümmel, who was able to advance his career under the Nazi régime (and, alas, entangled himself in some of its more sinister

operations),³¹ these three eventually left Germany, two of them forced to emigrate for racial reasons.

Curt Glaser (1879–1943)³² was a physician by training, but in 1907 he took a second doctoral degree in art history at the University of Munich with Heinrich Wölfflin (1864–1945), perhaps the most influential art historian in 20th-century Germany. Interrupted by wartime service as an army doctor, he worked as a curator at the Cabinet of Engravings in Berlin from 1909 until 1924, when he became the director of Berlin's peerless Art Library. Somehow, he found the time to publish voluminously in his original field of Medieval and Renaissance-period European art, as well as on European modernism and, more surprisingly, on East Asian art. His interest in the latter field had been inflamed during a research trip to China and Japan in 1912, after which he published two monographs that were important at the time.³³ Whether he was able to use East Asian languages for research is unclear. The Nazis dismissed him as a 'non-Aryan' in 1933 and forced him to auction off his collection of modern European paintings far below value as a condition for being allowed to emigrate. After moving from country to country for a decade, Glaser died penniless in the United States. His collection was not restituted to his heirs until 2012.

William Cohn (1880–1961)³⁴ obtained his doctorate in philosophy at the University of Erlangen in 1904, but his main interest was in art history, and he became a highly-regarded expert in the arts of Asia, where he travelled extensively. Cohn seems to have had no first-hand knowledge of Asian languages, and his voluminous works on the arts of various East, South, and Southeast Asian countries were for the most part directed at a general public.³⁵ Cohn's greatest merit was as an editor of journals, books, and monograph series on Asian art. After serving in the military during World War I, he worked from 1919 on the staff of the East Asian Art Collection in Berlin, becoming a curator (*Kustos*) at the Museum of Ethnography in 1929.³⁶ He was dismissed as a 'non-Aryan' in 1933; Kümmel's protection enabled him to continue working at the Museum until 1938 in the nominal capacity of secretary of the Society for East

²⁶ Walravens 1983–1985, v. 3; 1987; also Walravens and Kuwabara 2010: 9–11; 13–94.

²⁷ Klose 2000.

²⁸ Thiele 1973; Westphal-Hellbusch 1973.

²⁹ Kümmel 1911; 1921; Kümmel and Grosse 1925.

³⁰ To judge from the testimony of Karl With (1997: 120), this behavior seems to have long antedated the Nazi era.

³¹ Kümmel was notorious for his vicious denunciations of non-Nazi colleagues, which destroyed their careers (Lewin 1999); during World War II, moreover, he was deeply involved in the plundering of artworks from German-occupied territories (Haase 1991: 198–202; Petropoulos 2000: 56–57).

³² Walravens and Kuwabara 2012; Wendland 1998: 197–200.

³³ Glaser 1913; 1925.

³⁴ Wendland 1998: 98–100; see also the biography of Cohn by Wolfgang Klose at http://www.w-ch-klose.de/html/william_cohn.html (last consulted July 15, 2016).

³⁵ E.g., Cohn 1908; 1921; 1923; 1925.

³⁶ In a recently published letter written around that time, Cohn's predecessor, the philologist and archaeological explorer Albert Grünwedel (1856–1935) reacts to his appointment with a shocking Anti-Semitic tirade (Grünwedel 2001: 109–111).

Asian Art. That year at last he succeeded in emigrating to England, where he resumed his distinguished career as a museum professional and editor at Oxford and, for a time, at the British Museum.

Otto Fischer (1886-1948) was a fellow student of Glaser's under Wölfflin, specializing in early German art and earning his doctorate at the University of Munich in 1907. He started to be seriously interested in Chinese painting in 1909; in 1912, the University of Göttingen passed his *Habilitationsschrift* on Chinese landscape painting, which, due to interruption by wartime military service, did not appear as a book until 1923.³⁷ Despite a busy working schedule, Fischer continued to publish on Asian art during following decades. Having initially made his living by running an antiquarian bookstore in Munich, he entered upon a museum career and eventually became the director of the Art Museum of Basel (1927-1938), overseeing the construction of its widely-renowned new building. Fischer visited China in 1925, becoming enthusiastic about the painter Qi Baishi 齊白石 (Qi Huang 齊璜, 1864-1957), whom he introduced to an European audience. He remained in Switzerland after his retirement.

VI

The East Asian art history specialists discussed until now were all essentially self-taught; they had no university curriculum to fall back upon in developing their expertise, and none except for Kümmel seems to have had a working knowledge of Asian languages. On the positive side, they enjoyed complete freedom to explore their own predilections, guided only by their more or less well-honed scholarly instincts. But such a situation always entailed the danger of falling back into unrigorous amateurism. If East Asian art history was to develop into a legitimate field of study, it had to be firmly implantated in academic institutions. In Germany, this process started to occur just before the outbreak of World War I, thanks in large measure to the support of sympathetic holders of professorial chairs who were not themselves East Asian art history specialists. With their consent and, sometimes, encouragement, young scholars began to write theses on topics pertaining to East Asian art history. Otto Fischer, with his already mentioned 1911 *Habilitationsschrift*, seems to have been the first in Germany, and very likely worldwide, to obtain an academic degree with a thesis in that field. Doctorates on East Asian art history-related subjects, as far as I have been able to find out, were first awarded to some members of the 1890s generation during World War I.³⁸

³⁷ Fischer 1923.

³⁸ As a possible forerunner, Orell (2015: 3, n. 9) mentions Artur Wachsberger (1891-1943) who completed his doctorate at the University of Vienna in 1914 with a dissertation on the Buddhist wall paintings in present-day Xinjiang (Wachsberger 1916); but these wall

At the time, a university student interested in East Asian art history had the choice of majoring in either art history or Sinology. Otto Burchard (1892-1965),³⁹ for instance, obtained his PhD in Sinology under the eminent philologist August Conrady (1860-1925) at the University of Leipzig in 1917. But Burchard's primary interest was in art, and he wrote his dissertation was on a second-century AD rhapsody notable for its exuberant descriptions of palace architecture.⁴⁰ After his graduation he ran a gallery in Berlin, where, besides trading in Chinese art, he exhibited the Dadaists and other avant-garde artists. During the 1920s he made annual purchasing trips to China. Anticipating the rise of the Nazis, he moved his business to Beijing (then called Beiping) in 1932, where he was held in great respect as the best Western connoisseur of Chinese art of his generation. After World War II, he relocated again to the United States and, eventually, to England.

For those interested in becoming fully trained art historians specializing in East Asia, during the time shortly before and after World War I the University of Vienna offered the best opportunities. In 1909, the medievalist Josef Strzygowski (1862-1941) had broken away from the University's Institute of Art History and set up his own rival institute, where he supervised dissertations on topics that ranged over all of Eurasia. An extreme pan-German nationalist (toward the end of his life he even lobbied – unsuccessfully – to be appointed as Adolf Hitler's art-historical advisor), Strzygowski was bent on decoupling Germanic northern Europe from the Greco-Roman tradition, promoting instead the importance of 'Oriental' (Near Eastern, Islamic, Armenian, Persian, Egyptian, Indian) influences on medieval European art. Even though his own idiosyncratic work is often of questionable validity, Strzygowski, in his quest to prove his *idées fixes*, vigorously encouraged the expansion of the reach of art historical inquiry beyond Europe.⁴¹ As a case in point, in 1918, Strzygowski served as *Doktorvater* to Karl With (1891-1980),⁴² who had started his training in Vienna in 1912, travelled in Asia in 1913-14, and survived four years of trench warfare on the Western front. With was able to finish his dissertation on early

paintings were then considered part of a 'Buddhist Late Antiquity' (*Buddhistische Spätantike*) that – ultimately of Mediterranean derivation – belonged to the realm of Indian rather than East Asian art history. After World War I, Wachsberger ran a design-furniture business in Cologne and eventually emigrated to Palestine. He made no further contribution to Asian art history.

³⁹ Jirka-Schmitz 1995; Wendland 1995: 82-83. Falkenhausen, forthcoming (1).

⁴⁰ Burchard 1917. As far as I can tell, the dissertation was never published; technically, therefore, Burchard was not entitled to use the title of 'Doktor.'

⁴¹ Marchand 2009: 403-410.

⁴² On With, see With 1977; 1994; Walravens 1983-85, v. 1: F15-24; Falkenhausen, forthcoming (2). The dissertation was published as With 1919.

Japanese sculpture during a special furlough before the war ended.

To my knowledge, With was first person in the German-speaking world – and indeed probably anywhere – to obtain an art history doctorate with a dissertation on an East Asian topic.⁴³ He published extensively in that field while pursuing a highly successful career as a museum director, art-school director, and public intellectual under the Weimar Republic. In the early 1920s, the eminent medievalist Paul Clemen (1866–1947) attempted to have him hired as an instructor of East Asian art at the University of Bonn;⁴⁴ if With had obtained the *Habilitation* – a kind of super-PhD necessary for rising to professorial status in the German university system – that job might in time have been converted into Germany's first full academic chair in East Asian Art History. And it seems that With did for a time explore the possibility of doing a *Habilitation* at the University of Cologne, but this plan came to naught due to personal differences with the occupant of the University's chair of art history, Albert Erich Brinckmann (1881–1958).⁴⁵ As a result, With ended up declining Clemen's invitation. In 1933 the Nazis dismissed him as director of the Cologne Museum of Applied Arts for political reasons; in 1939 he emigrated to the United States, where, after holding various teaching and museum positions, he ended his career as a much-beloved professor at UCLA.⁴⁶

Although the cut-off date for the present account is the end of World War I, mention needs to be made of two art historians who obtained their doctorates in 1920 but had begun their training before the war.

Alfred Salmony (1890–1958)⁴⁷ – incidentally, a nephew of Werner Rüdenberg (1881–1961), compiler of the first comprehensive Chinese-German dictionary⁴⁸ – had been With's fellow-student under Strzygowski before 1914. Injured at the front in 1916, he returned to his hometown of Cologne for convalescence, during which time he continued his dissertation research and volunteered at that city's Museum of East Asian

Art.⁴⁹ He obtained a curatorial position there after the war. At that point it was presumably impractical for him to return to Vienna to complete his studies; instead, he defended his dissertation on East Asian Buddhist sculpture at nearby Bonn with Clemen as his advisor. Salmony eventually became the director of his museum and taught part-time at Cologne University. In 1933 he was dismissed by the Nazis as a 'non-Aryan' and emigrated to the United States, where, as professor at Mills College and later at the Institute of Fine Arts at New York University, he contributed significantly to the growth of the East Asian art history field.

Ludwig Bachhofer (1894–1976)⁵⁰ was yet another student of Wölfflin's at the University of Munich. But different from his pre-World War I practice, in Bachhofer's case – perhaps out of consideration of the fact that he was a war veteran – Wölfflin accepted a dissertation on an East Asian topic: Japanese woodblock prints. In 1926, still at Munich, Bachhofer passed his *Habilitation*,⁵¹ thus becoming (probably) the second East Asian art history specialist in Germany after Fischer to possess such a qualification. Working as a curator at Munich's Museum of Ethnography, Bachhofer then taught without salary as a *Privatdozent* at the University of Munich. In 1933 he was approved for a supernumerary professorship, but the Nazi government rescinded the appointment because of his wife's 'non-Aryan' descent. Emigrating to the United States in 1935, Bachhofer taught with great distinction as a professor at the University of Chicago for the rest of his career.

Counterintuitive though it may seem, it was only after a number of advanced degrees had been awarded that university curricula of East Asian art history were developed. The German university system allows for holders of professorial chairs to teach outside their own fields, and there is evidence that some holders of art history chairs who lacked a specialist knowledge of East Asian art taught courses in that field out of personal fascination.⁵² But it was only with the emergence of properly credentialed specialists in East Asian art history that expert instruction gradually became available at some German universities during the 1920s. Kümmel, Salmony, and (more rarely) With taught the subjects as adjuncts at universities near where they lived. Fischer and Bachhofer, moreover, in order to

⁴³ With the arguable exception of Wachsberger (see above). One should not, moreover, underestimate the possibility that there were others who have slipped from historical memory. For instance, With (1994: 86) mentions one 'Frau Stalissny' as an East Asia expert among his fellow students under Strzygowski; I have not been able to find out whether – and if so, when – she ever completed her doctorate. In any event, the late Jon Carter Covell's (1910–1997; PhD [Columbia University] 1941) oft-repeated claim (e.g., on the dust-jacket of Covell 1981) to have been 'the first Westerner to obtain a doctorate in Oriental art history' has no merit.

⁴⁴ With 1997: 111.

⁴⁵ With 1977.

⁴⁶ Falkenhausen, forthcoming (2). With's voluminous archives are at the Getty Research Institute in Los Angeles.

⁴⁷ On Salmony, see Kern 1998: 523; Trübner 1977; Walravens 1983–1985, v. 2: 1–66; Wendland 1998, v. 2: 577–580. His dissertation was published as Salmony 1922.

⁴⁸ Rüdenberg 1924.

⁴⁹ Salmony was drafted back into the war at the end of 1916; the circumstances may be deduced from a letter from Salmony to With dated November 7, 1916 (Karl With Archives, Getty Research Institute, Los Angeles, Box 2, Folder 8).

⁵⁰ On Bachhofer, see Kern 1988: 217; Vanderstappen 1977/78. See also Walravens 1983–1985, v. 1, F1–23; v. 2: i–ix. Wendland 1998, v. 1: 18–20. His dissertation was published as Bachhofer 1922.

⁵¹ Bachhofer's *Habilitationschrift* does not seem to have been published. It may have been about Gandharan sculpture, a topic on which he published extensively around that time.

⁵² E.g., Wilhelm Worringer (1881–1965) at Bonn University in the late 1920s (Erdberg 1994: 92).

retain the privileges acquired through the *Habilitation*, were required to teach a certain contingent of courses every year without compensation until offered a professorship. As it turned out, professorial chairs in East Asian Art History were not to be established in German universities until some time after World War II.

Kümmel was the first properly trained expert in East Asian art history to serve as *Doktorvater* to PhD students. But as far as I know, he did not do this until the mid-1930s – quite possibly because he was not allowed to.⁵³ For it does not seem that Kümmel ever obtained the *Habilitation*, which was, in principle, the precondition for chairing a dissertation committee. In this respect, the rise to power of the Nazis may have brought about a (temporary) loosening of the old academic rules – especially in the case of a trusted party member like Kümmel.

VII

As Virginia Woolf famously put it, 'On or about December 1910, human character changed.'⁵⁴ The greatly increased intensity and intellectual quality of art-historical research conducted during the decade or so before World War I, in Germany and elsewhere, are part and parcel of the advent of modernism. One essential aspect of modern life is the cutting-off of one's ties with one's own past tradition, which is replaced with the piecemeal and voluntary participation in the totality of the intellectual heritage from all civilizations of the world. The work of the scholars discussed herein provided orientation to a public that was just getting used to facing the full smorgasbord of choices.

Whether in Germany or elsewhere in the West, the growth of East Asian art history into a legitimate academic discipline certainly could not have taken place without a groundswell of interest from the educated general public – men and women from all walks of life, from wealthy collectors, artists, designers, and businesspeople with commercial interest in Asia, down to innumerable ordinary art lovers. The professionalization of the field took place in constant interaction with this wider supportive community. To say that Museums played a crucial mediating role in kindling and sustaining wider interest in East Asian art and its history amounts to stating the obvious. In Germany, as we have seen, throughout the period covered herein, museum work was almost the only career option open to a scholar with a professional interest in East Asian art history.

In the 19th century it was mostly ethnographic museums as well as Arts and Crafts museums that collected East Asian objects; even today, many such museums maintain significant collections of East Asian art (in Germany, those of the Museum of Ethnography in Munich and the Museum of Applied Art in Hamburg stand out). But the recognition that East Asian art was the equal of European art and needed to be understood on its own terms brought with it the realization of a need for specially dedicated East Asian art museums. As far as I know, the honour of being the first museum in Europe to begin fulfilling such a role belongs to the Musée Guimet, which was founded in Lyon in 1879 and opened its doors in Paris in 1889; second in order was the Musée Cernuschi, likewise in Paris, inaugurated in 1898. But their presentations were not, at the time, guided by art-historical principles in the strict sense: Émile Guimet's (1836-1916) collecting focus had been on comparative religion and only secondarily on art as such (and his museum comprised all of Asia, not merely East Asia); whereas Henri Cernuschi's (1821-1896) collection was an idiosyncratic hodgepodge of uneven quality still reflecting mid-19th century standards of connoisseurship.

In Germany, the above-mentioned Woldemar von Seidlitz cogently formulated the need for a specialized German museum of East Asian art in a polemical essay that was first published in 1905.⁵⁵ By then, efforts into such a direction had been underway in Berlin for decades, but they kept being stalled due to lack of funds and bureaucratic obstruction. As it turned out, the first Museum of East Asian Art in Germany was the already-mentioned one in Cologne, which was founded in 1909 and opened to the public in 1913.⁵⁶ Its collection had been donated by the collectors Adolf Fischer (1856-1914) and Frieda Fischer (1874-1945) (no relation to Otto Fischer), who had assembled it mostly in Japan. This was probably the first stand-alone museum of East Asian art in the world arranged according to art-historical principles.

As to Berlin, Friedrich Hirth reports in his memoirs that at one point in the late 1880s he was offered, but for various reasons declined, the directorship of a new museum of East Asian art that was to be separated out of the Museum of Ethnography.⁵⁷ The administrative autonomy of the East Asian Art Department (*Ostasiatische Kunstabteilung*; more commonly known as the East Asian Art Collection, *Ostasiatische Kunstsammlung*) was eventually enacted in 1906, when Director General von Bode appointed Kümmel as head of the new entity. But the efforts of Bode, Kümmel and

⁵³ This would perhaps explain why, in 1932, Victoria Contag (1906-1973), who had received much of her training with Kümmel and served for a time as his assistant at the Museum, had to go to Hamburg to obtain her PhD with the Sinologist Alfred Forke (1867-1944), rather than being able to take it with Kümmel himself.

⁵⁴ Woolf 1924.

⁵⁵ Seidlitz 1905. See Severin 1995 for further discussion.

⁵⁶ On the history of the museum, see Schlombs 2009; see also Goepper *et al.* 1977; Wiesner 1984.

⁵⁷ Hirth 1921: xxiii.

their staff to bring together previous holdings into the new museum continued to be met with tremendous resistance, especially from the side of the Museum of Ethnography, which was loath to part with some of its finest pieces, and also for considerations of methodological principle.⁵⁸ Much of Kümmel's work thus consisted in a kind of day-to-day guerrilla warfare with his colleagues, always under financially precarious conditions. World War I delayed the opening of the new museum until 1924.⁵⁹

Before the war, high-flying plans existed for the construction of a separate museum building, which would have been part of a gigantic new museum complex to be built in the suburb of Dahlem.⁶⁰ These plans were revived under the Weimar Republic; to help fund them, Bode, by then in retirement, sold his personal library at auction. Tragically, the funds raised almost immediately lost all their value during the hyperinflation of 1923, and the project was shelved indefinitely.⁶¹ Instead, the East Asian Art Collection was allocated space in the building of the Museum of Applied Arts (now known as the Martin-Gropius-Bau).

The East Asian Art Collection essentially had to built up from zero (it was not until 1942 that Kümmel was able to strong-arm the Museum of Ethnography into a one-time transfer of some 120 objects from its collections).⁶² Kümmel laid down the following three principles:

- '(1) The collection should present a comprehensive and well-balanced overview of the arts of China, Japan, and Korea.
- (2) Painting occupies the highest rank among the arts.
- (3) Esthetic quality is the overriding criterion in selecting artworks.⁶³

Kümmel's colleagues followed his efforts with sympathy. Glaser wrote:

'[The collection is] solely devised according to artistic considerations; it is essentially a collection of quality [*Qualitätssammlung*], not limited to a

certain cultural epoch or striving for iconographic completeness; instead, it endeavours like any other art collection to bring together a number of typical examples of the very best of all periods and styles.⁶⁴

By all accounts, Kümmel's display of the collection, when it was finally opened to the public, was a triumph.

In the pre-World War I era as today, one way to excite the popular interest in a particular field of art history was through blockbuster exhibitions. Comprehensive shows of East Asian art, drawn mostly from museums and private collections in Germany, took place in Munich in 1909 and in Berlin in 1912. The latter show was the first opportunity for Kümmel to show his mettle publicly; despite some incomprehension in the right-wing press, the scholarly community considered it a resounding success.⁶⁵ After the war, exhibitions resumed, some of them now including loans from Japan and China, as well as from Europe and the United States.

Taking advantage of the success of the 1912 exhibition, Kümmel and Cohn founded the *Ostasiatische Zeitschrift* (East Asian Journal), the first Western-language journal dedicated to the visual arts of East Asia. Reconfigured in 1924, the *OZ* was published until 1943 and was revived in 2001.⁶⁶ By 1925, the field had grown so strong that a second scholarly journal, *Artibus Asiae*, was launched. It was to cover not merely East Asia but all of Asia, and it continues to flourish today as the undisputed flagship journal of the field. Published in Leipzig until 1939, it moved to Ascona, Switzerland, in 1944 and relocated to New York in 1992.⁶⁷ About the same time, in 1926, the lay public organized itself in the Society for East Asian Art (*Gesellschaft für Ostasiatische Kunst*). In summary, even though professorships in East Asian art history were still lacking, one may say that the discipline had begun to reach maturity by the mid-1920s.

VIII

East Asian art history may be paradigmatic for how, in the 19th and early 20th centuries, new fields were established within the European academic system. In retrospect, the progression outlined in the preceding sections seems logical enough: having overcome their initial rejection of East Asian visual culture, intellectuals came to acknowledge it as equal in sophistication and importance to European art, removed it from the status of mere ethnographic curiosities, and, in a process that

⁵⁸ For instance, in a recently published letter, Albert Grünwedel, a former member of the staff of the Museum of Ethnography, voices his outrage over the 'ripping apart' based on 'artistic norms (*Kunstnormen*)' of the Museum's historically grown collections (Grünwedel 2001: 106–108).

⁵⁹ Veit 2000, 2009. In some sources the year is given as 1923, but 1924 seems correct.

⁶⁰ Thiele 1973; Westphal-Hellbusch 1973.

⁶¹ Severin 1995. See also Scheffler 1921.

⁶² Veit 2009.

⁶³ '1. Die Sammlung soll ein übersichtliches und ausgewogenes Bild der Künste in China, Japan und Korea bieten. 2. Die Malerei nimmt den höchsten Rang unter den Künsten ein. 3. Die ästhetische Qualität ist das wichtigste Kriterium bei der Auswahl der Stücke' (cited as summarized in Wang 2016). On the history of the Berlin East Asian Art Collection, see also Butz 2006; Ledderose 1998; Veit 2000; 2009.

⁶⁴ Glaser in Der Cicerone 1909.7, cited in Veit 2009: 312. '...lediglich nach künstlerischen Gesichtspunkten angelegt, im wesentlichen eine Qualitätssammlung, nicht auf eine bestimmte Kulturepoche beschränkt oder nach ikonographischer Vollständigkeit strebend, sondern wie jede andere Kunstsammlung bemüht, vom besten aller Zeiten und Stile eine Reihe typischer Beispiele zu bringen.'

⁶⁵ For the press echo of the latter show, see Walravens 1983–85, v. 3.

⁶⁶ Walravens 2000.

⁶⁷ Lawton 1995.

extended over several generations, gradually brought it under the purview of the academic discipline of art history. These efforts were linked in a feedback loop to popular and collectors' interests as well as to the growth of museums and academic institutions; beyond which there were wider cultural trends such as the rise of the Humboldtian paradigm and the advent of modernism that spurred the deepening of interest in East Asian art history. There is, of course, much more to the story, and much room remains for further detailed study. But I must now close with some remarks that will link the developments traced herein to the present day.

Berlin, the hometown of the Humboldt brothers, provided a unique intellectual environment for the forging of a new approach to East Asian art that was grounded in the quest to understand it on its own terms and which required a dual expertise in both art history and East Asian languages. Encouraging progress was very much in evidence by the 1920s. But unfortunately, it was also in Berlin that the fragility of the achievement was revealed. For the first time, this happened when the Nazi régime shunted out of Germany all the remaining serious experts in East Asian art history born before 1900 except for Kümmel. Kümmel's life's work in turn was undone by World War II: the museum and its library were destroyed and the bulk of the collection taken to Russia, where it remains; none of it has been displayed for over 75 years.⁶⁸ Kümmel himself died under a cloud shortly thereafter.

None of the émigrés returned to Germany, but the intellectual achievements made by German specialists in East Asian art history since the 19th century were by no means lost. Instead, they were transplanted to other places, mainly to the United States, where the field came fully into its own, as it became *de rigueur* for each institution of higher learning to have at least one East Asia specialist on its art history faculty. East Asian art history is a somewhat extreme instance of the comprehensive strengthening of American academia that occurred as a consequence of the mass flight of intellectuals from the Nazi tyranny.⁶⁹ If we consider – as I believe we must – the growth of the academic field of East Asian art history as a transnational phenomenon, then, rather than to emphasize Germany's loss and America's gain, it may be preferable to say that the field's geopolitical centre of activity shifted to the New World. It may shift again in the future, perhaps this time to East Asia itself.

After World War II, East Asian art history in Germany made a surprising recovery. In West Berlin, a new collection of East Asian art was built up virtually from scratch. The Dahlem museum complex was built at

last,⁷⁰ albeit at a much-reduced scale and in a modernist style different from the original plans; it included a state-of-the-art Museum for East Asian Art, realizing at last the vision of Bode and Kümmel from the halcyon days before World War I. A stand-alone 'East Asian Collection' also existed on the Museum Island in East Berlin; after the unification, it was merged with its West Berlin counterpart and transferred to Dahlem in 1992.

But recently things have unravelled for a second time. In 2006 the Museum of East Asian Art was combined with what had previously been the Museum of Indian Art into the Museum of Asian Art, and that museum in turn was closed in 2016. Intermixed with the Museum of Ethnography (though, at least according to current plans, still nominally separate), it will move into the so-called 'Humboldt-Forum' that is slated to re-open in 2019 in the newly reconstructed former palace of the Prussian kings in the centre of Berlin.⁷¹

This ill-conceived reorganization risks undoing Bode's and Kümmel's hard-won achievement, which consisted precisely in removing East Asian art from the objectifying purview of the ethnographers in order to enable its fuller understanding by means of its presentation as art on a par with European art. And in spite of its appropriation of the Humboldt name, the new institution's published programmatic statements indicate, if anything, a decisive turning away from, if not a betrayal of, Humboldtian ideals and their epistemological optimism.⁷² Instead of promoting immersive, philologically informed scholarship aimed at building a deep understanding of unfamiliar cultures – the kind of scholarship that Berlin and the Humboldt brothers once stood for – it is announced that the presentation at the 'Humboldt-Forum' will be guided by the utterly retrograde idea of the *Wunderkammer* (chamber of miracles). This suggests that the 'Humboldt-Forum' will be content to elicit uninformed Westerners' fascination with the exotic and leave it at that.

Although it is too early to pass judgment over a presentation before it has even opened to the public, one fears that the 'Humboldt-Forum,' rather than to serve as a touchstone for intellectual engagement, will instrumentalize Berlin's painstakingly assembled collections of non-European art for the purposes of superficial entertainment. The result threatens to be a fall-back to the age of Chinoiserie and Japonisme – to a time, which until recently seemed to be very far in the past, when, to Europeans, the visual remains of

⁶⁸ Klose 2000; Kümmel 1948; Veit 2009.

⁶⁹ See Kern 1988.

⁷⁰ Thiele 1973; Westphal-Hellbusch 1973.

⁷¹ <http://www.humboldt-forum.de/humboldt-forum/idee/> (last consulted July 15, 2016).

⁷² <http://www.sbs-humboldtforum.de/en/Foundation/Mission-Statement/>; <http://www.humboldt-forum.de/en/humboldt-forum/philosophy/the-kunstkammer-principle/> (last consulted October 22, 2016).

East Asian cultures were mere curiosities. Rather than moving inexorably forward, history is apparently about to come full circle. For shame!

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The Settlement Size and Population Estimation of the Urartian Cities

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Abstract: The absence of relevant written texts leaves settlement size as the main source for estimation of the numbers of inhabitants of Urartian cities. Even in this case the information is scanty, as the excavations at the Urartian sites were usually centered around the main buildings in the ‘citadels’ enclosed by fortification walls and the efforts spent on unearthing the residential quarters of the settlements located outside the fortification walls, were certainly insufficient. This has resulted in overestimations of the population numbers proposed for some Urartian cities. By better analysing the surface area, building density, the city-building mindset, and the nature of the Urartian state, it may become possible to more accurately calculate the numbers of inhabitants in Urartian cities.

Keywords: Urartu, city-building, ‘palace-temple’, settlement size, surface area, population density, population estimation.

Introduction

The research of Gregory E. Areshian knows no temporal or spatial bounds, and the Urartian civilization was, certainly, one of the stations on his scientific road, during his long-lasting travel through civilizations. Among the studies dedicated to Urartu, his works concerning architecture and typology of the Urartian settlements are noteworthy.¹ There is little to add to these works after decades, except of one or two new settlement types, about which we learn from the susi-temple inscription of Ayanc’/Ayanis. Yet, among the topics supplementing his work is the issue of estimation of the population size in those settlements.

Town-building in Urartu: The Textual Evidences

The earliest texts yielding evidence about Urartian city and fortress building are dated to the period of the reign of Išpuini Sardurihi (ca. 820-810 BC). Later texts refer to the years of the reign of Argišti Rusaḫi and Rusa Argištihi (late 8th – first half of the 7th c. BC). In total, no less than fifty six inscriptions contain information about building of É.GALs (‘fortresses’, see Figure 1). Seventeen inscriptions provide evidence of the founding of URUs, Urart. patari (‘city’ or ‘town’, see Figure 1). The majority of the texts belong to the period of the reign of Menua Išpuinihi (ca. 810-790 BC).² In five inscriptions some of these cities are defined by the sumerogram É.BÁRA (Figure 1).

In the inscriptions of the Urartian rulers, it is mostly the large administrative centres that are mentioned by name. The first among those is the ‘City of Ḫaldi’

(^Ḫaldini URU),³ founded by Išpuini. The name of this city is mentioned in one of the stelae found from Karahan, not to be confused with the ‘City of Ḫaldi’ (^Ḫaldini(ni) URU, lit. ‘Ḫaldean city’),⁴ known from the inscription of ‘Mheri duṛ/Meher kapısı.’ The next city known by name was founded by Menua in the vicinity of Mount Ararat/Ağrı Dağı and bears the king’s name – ^mmenuaḫinili.⁵ We can hypothesize about the existence of another two cities named ^mmenuaḫinili, one – in the Lake Van basin, and the second one – somewhere in the Urartian territories around Lake Urmia.⁶

During the reign of Argišti Menuaḫi (ca. 790-770 BC) two large centres were established in the Ararat plain – ^{URU}er(e)buni⁷ and the ‘City of Argište/iḫinili of the land of Țaza’ (^margišteḫinili, ^margištiḫina ^mazani KUR-ni – Armavir Blur and Sb. Davti Blur).⁸ Another city named Argištiḫinili (^margištiḫinili) was founded somewhere in Muş plain or in its vicinity.⁹ Most likely, it was the large Urartian fortress at Kayalıdere that bore that name.¹⁰

The large-scale city-building projects were continued by Sarduri Argištihi (ca. 770-735 BC), who founded a new centre named after him – ^msarduriḫinili

³ CTU I, A 2-9A.

⁴ KUKN, 38 Text I₁₅, II₂₅; CTU I, A 3-1₁₅, 56*.

⁵ KUKN, 48, 87; CTU I, A 5-26, A 5-27.

⁶ Generally speaking, another four texts mentioning a city under the name Menuaḫinili are preserved. Their geographical distribution and some related toponyms appearing in these texts lead us to think about different cities bearing the same name. See KUKN, 79, 101; CTU I, A 5-23, A 5-24, A 5-25; CTU IV, CB Ay-3.

⁷ KUKN, 173 II₃₂₋₃₄, 174 A2₁₄₋₁₇, 197-198, 200-201; CTU I, A 8-3 II₃₂₋₃₄, A 8-1 Vo₁₄₋₁₇, A 8-17 A-B, A 8-18, A 8-19.

⁸ KUKN, 173 IV₇₂, 174 B2₄₁, 188, 193; CTU I, A 8-2 Ro₄₁, A 8-3 IV₇₂, A 8-14, A 8-16.

⁹ CTU I, A 8-22.

¹⁰ Dan, Salvini 2011: 431ff.

¹ Areshian 1974: 208ff.; 1975: 86ff.

² 36 inscriptions out of 56 and 9 inscriptions out of 17 respectively, see the Figures.

Işpuini Sardurihi (ca. 820-810 BC)				
KUKN: 531 (1); CTU I, A 2-6 A-C	Lower Anzaf	É.GAL	–	–
CTU I, A 2-9A	Karahan	É.GAL	–	–
KUKN, 20A; CTU I, A 2-9B	Karahan	É.GAL	URU	–
Menua Işpuinihi (ca. 810-790 BC)				
KUKN, 57; CTU I, A 5-6 Ro b	Drmerd/Tirmet	É.GAL	–	–
KUKN, 45; CTU I, A 5-10	Tashtepe	É.GAL	–	–
KUKN, 148; CTU I, A 5-11A	Aznavurtepe	É.GAL	–	–
KUKN, 149; CTU I, A 5-11B	Aznavurtepe	É.GAL	–	–
KUKN, 75; CTU I, A 5-17 Ro	Arcvaberd/Salmanağa	–	URU	–
CTU I, A 5-24 Vo	Karahan	–	URU ^m menuaḫinili	–
KUKN, 101; CTU I, A 5-25	Badnoc'/Patnos (?)	É.GAL ^m menuaḫinili	–	–
KUKN, 87; CTU I, A 5-26	Bulakbaşı	É.GAL ^m menuaḫinili	–	–
KUKN, 48; CTU I, A 5-27	C'olakert/Taşburun	É.GAL	URU (?)	–
KUKN, 172a; CTU I, A 5-28 Ro	Karahan	É.GAL	URU	–
KUKN, 38a; CTU I, A 5-29 Ro	Karahan	É.GAL	URU	–
KUKN, 41+42; CTU I, A 5-30 Ro	St. Stephanos/Berkri	É.GAL	URU	–
KUKN, 40; CTU I, A 5-31 Ro	unknown	É.GAL	URU	–
KUKN, 117; CTU I, A 5-32	Varagavank/Yedikilise	–	URU	–
KUKN, 82; CTU I, A 5-33	Gyuzak/Koşk	É.GAL ^d ḫaldi patari	–	–
KUKN, 98; CTU I, A 5-34	Šušanc'/Kevenli	É.GAL	URU	–
KUKN, 84; CTU I, A 5-35	Gorcot'/Körzüť	É.GAL	–	–
KUKN, 83; CTU I, A 5-36	Gyuzak/Koşk	É.GAL ^d ḫaldi URU	–	–
KUKN, 150; CTU I, A 5-37	Badnoc'/Patnos	É.GAL	–	–
CTU I, A 5-38	Aznavurtepe	É.GAL	–	–
KUKN, 113; CTU I, A 5-39	Badnoc'/Patnos	É.GAL	–	–
CTU I, A 5-40A	Pirapat	É.GAL	–	–
CTU I, A 5-40B	Pirabat	É.GAL	–	–
KUKN, 85; CTU I, A 5-41A	Delibaba	É.GAL	–	–
KUKN, 86; CTU I, A 5-41B	Hasankale	É.GAL	–	–
KUKN, 172b; CTU I, A 5-42A 1.d	Upper Anzaf	É.GAL	–	–
KUKN, 88; CTU I, A 5-42B 1.s	Upper Anzaf	É.GAL	–	–
KUKN, 172b; CTU I, A 5-42C 1.d.	Upper Anzaf	É.GAL	–	–
KUKN, 89; CTU I, A 5-43	Upper Anzaf	É.GAL	–	–
Işık 2015: 61ff.	Upper Anzaf	É.GAL	–	–
KUKN, 91; CTU I, A 5-47	Kořbanc'/Kobanis	É.GAL	–	–
KUKN, 90; CTU I, A 5-51	Manazkert/Malazgirt	É.GAL	–	–
CTU I, A 5-52	Başkale	É.GAL ^d ḫaldi URU	–	–
KUKN, 46; CTU I, A 5-61	Qalatgah	É.GAL	–	–
KUKN, 114+533(5); CTU I, A 5-62	Upper Anzaf	É.GAL	–	–
KUKN, 99; CTU I, A 5-67	Bostankaya	É.GAL	–	–
CTU IV: 262, A 5-100	Gorcot'/Körzüť	É.GAL	–	–
CTU IV: 264, A 5-102A	Upper Anzaf	É.GAL	–	–
CTU IV: 264, A 5-103	Badnoc'/Patnos	É.GAL	–	–
Argiřti Menuaḫi (ca. 790-770 BC)				
KUKN, 188; CTU I, A 8-16	Sardarabad	É.GAL ^m argiřtiḫinili	–	–
KUKN, 197; CTU I, A 8-17A	Arin Berd	É.GAL ^{URU} erbuni	–	–
KUKN, 198; CTU I, A 8-17B	Arin Berd	É.GAL ^{URU} erbuni	–	–
KUKN, 200; CTU I, A 8-18	Arin Berd	É.GAL ^{URU} erbuni	–	–
KUKN, 201; CTU I, A 8-19	Arin Berd	É.GAL ^{URU} erbuni	–	–
KUKN, 199; CTU I, A 8-20	Arin Berd	É.GAL	–	–
CTU I, A 8-22	Kepenek/Muş	É.GAL ^m argiřtiḫinili	–	–
Sarduri Argiřtiḫi (ca. 770-735 BC)				
KUKN, 247; CTU I, A 9-17	Haykaberd/Çavuştepe	É.GAL ^m sarduriḫinili	URU	É.BÁRA
CTU I, A 9-18	Bahçecik	É.GAL ^m sarduriḫinili	–	–

The source	Provenance	The building project		
KUKN, 272; CTU I, A 9-37	Bambakašat	É.GAL	–	–
Rusa Sardurihi (ca. 735-714 BC)				
KUKN, 388; CTU I, A 10-1	Gavar	É.GAL ^d haldiei URU	–	–
KUKN, 389; CTU I, A 10-2	Covinar	É.GAL ^d IM-i URU	–	–
Argišti Rusahi (ca. 708-690/80 BC)				
KUKN, 406; CTU I, A 11-2	Hagi	–	URU ^{MEŠ}	–
KUKN, 409; CTU I, A 11-4	Razliq	É.GAL ^m argištei irdusi	–	–
CTU I, A 11-6	Shisheh	É.GAL ^d haldiei irdusi	URU	–
Rusa Argištihi (ca. 690/80-640 BC)				
CTU I, A 12-1	Ayanis	É.GAL ^m rusaḥinili ^{KUR} eidurukai	URU	É.BÁRA
KUKN, 489; CTU I, A 12-4 II	Adilcevaz-Kef-Kkalesi	É.GAL ^d haldiei URU ^{KUR} ziuquni	URU	É.BÁRA
KUKN, 419; CTU I, A 12-7	Maku	–	–	É.BÁRA Rusai URU.TUR
KUKN, 421; CTU I, A 12-8	Zvart'noc'	–	URU	–
KUKN, 412b; CTU I, A 12-9	Ayanis	É.GAL ^m rusaḥinili	URU	É.BÁRA

Figure 1. The evidence about city and fortress building according to Urartian texts.

(Haykaber/Çavuştepe).¹¹ Another ^msarduriḥinili was built somewhere to the west of lake Van, perhaps, in the territory of ancient Alzi(ni)/Ałjnik', modern Elâziğ in Eastern Turkey.¹² It is important to mention that Sarduri also expanded on a massive scale the cities and towns built by his father Argišti.

Another two towns are mentioned by name in the inscriptions of Rusa Sardurihi (ca. 735-714 BC), named after Ḫaldi, the chief god of the state and the Thunder god, respectively (^dhaldiei URU and ^dIM-i URU).¹³

Judging from the Urartian inscriptions, the most important centre built by Argišti Rusahi (ca. 708-690/80 BC) was the city ^margišteḥinili ^{KUR}artarapšakai, named after that king.¹⁴ Location of the latter has not yet been identified, and now only the Artarabša mountain is identified with one of the peaks of the Akçadağ or with Aladağlar mountains.¹⁵ In his inscriptions, foundations of new fortresses are also mentioned, which are known by name (^dhaldiei irdusi, ^margištei irdusi).¹⁶

The last city-founding projects were realized by Rusa Argištihi (ca. 690/80-640 BC). The establishment of at least four large administrative centres is evidenced in

the sources. These are the 'City of Tejšeba of the land of Uza' (^dteišebaini/^dIM-ni URU, ^mazaini ^{KUR}-ni ^dIM-ni URU – the site of Karmir Blur),¹⁷ 'Rusa's small city' (^mrusai URU.TUR – Bastam),¹⁸ the 'City of Ḫaldi of the land of Ziuquni' (^dhaldiei URU ^{KUR}ziuquni – Kef Kalesi),¹⁹ and the '(City of) Rusaḥinili in front of (mount) Eiduru' (^mrusaḥinili ^{KUR}eidurukai – Ayanis).²⁰ As for the '(City of) Rusaḥinili in front of (mount) Qilbani' (^mrusaḥinili ^{KUR}qilbanikai – Toprakkale),²¹ the time of foundation of this city, as well as the identification of the founder king are still debatable, though the candidature of Rusa Erimenahi seems more plausible than others.²²

The Urartian texts often mention the building of a '(new) city' along with É.GAL (... šidištuni eḡe É.GAL šuḡi e'a URU).²³ At least eleven texts have this kind of content (Figure 2). Judging from the existing data, the texts refer to both the 'outer town' adjacent to the fortress and other, mostly rural settlements. In this case, it is important to note that some of the towns (URU^{MEŠ}),²⁴ mentioned by name in connection with constructing irrigation canals, as, for example, ^{URU}uquḡani, ^{URU}zuguḡe,

¹¹ KUKN, 247; CTU I, A 9-17.

¹² CTU I, A 9-18. See also KUKN, 274, where the author suggested the existence of a third (?) city, bearing Sarduri's name, located near Arčeš, modern Erciş. Cf. CTU I, A 9-10.

¹³ See KUKN, 388-389; CTU I, A 10-1, A 10-2.

¹⁴ KUKN, 406 Obv. ₄₋₅; CTU I, A 11-2 Vo ₄₋₅.

¹⁵ CTU IV: 183.

¹⁶ KUKN, 409-410; CTU I, A 11-4, A 11-5, A 11-6.

¹⁷ KUKN, 422, 424; CTU I, A 12-2 I, CTU IV, B 12-15, CB Ay-4.

¹⁸ KUKN, 419; CTU I, A 12-7.

¹⁹ KUKN, 414; CTU I, A 12-4.

²⁰ CTU I, A 12-1 VI ₄₋₉, A 12-91-11.

²¹ KUKN, 391, 412; CTU I, A 14-1 Ro, CTU IV, CT-Tk-1 Ro.

²² For discussions see and cf. Çilingiroğlu 2008: 21ff.; Kroll 2012: 183ff.; Roaf 2012: 187ff.; Salvini 2007a: 146ff.; 2007: 464ff.; 2012b: 111ff.; Seidl 2007: 137ff.; 2012: 177ff.

²³ Cf. e.g. KUKN, 75 ₃₉₋₃₁, 172a ₈₋₁₀; CTU I, A 5-17 Ro ₃₉₋₃₁, A 5-28 Ro ₈₋₁₀, etc.

²⁴ KUKN, 406, Rev. _{x+27+11}; CTU I, A 11-2 Vo ₂₇₊₁₁.

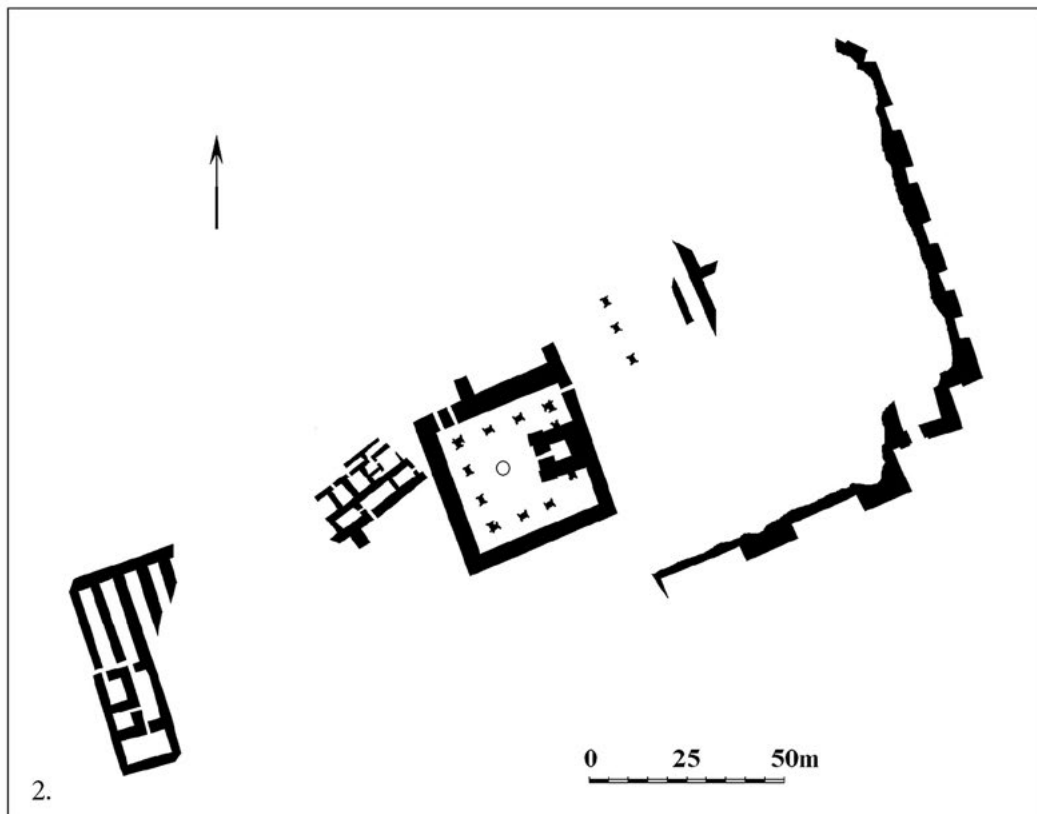
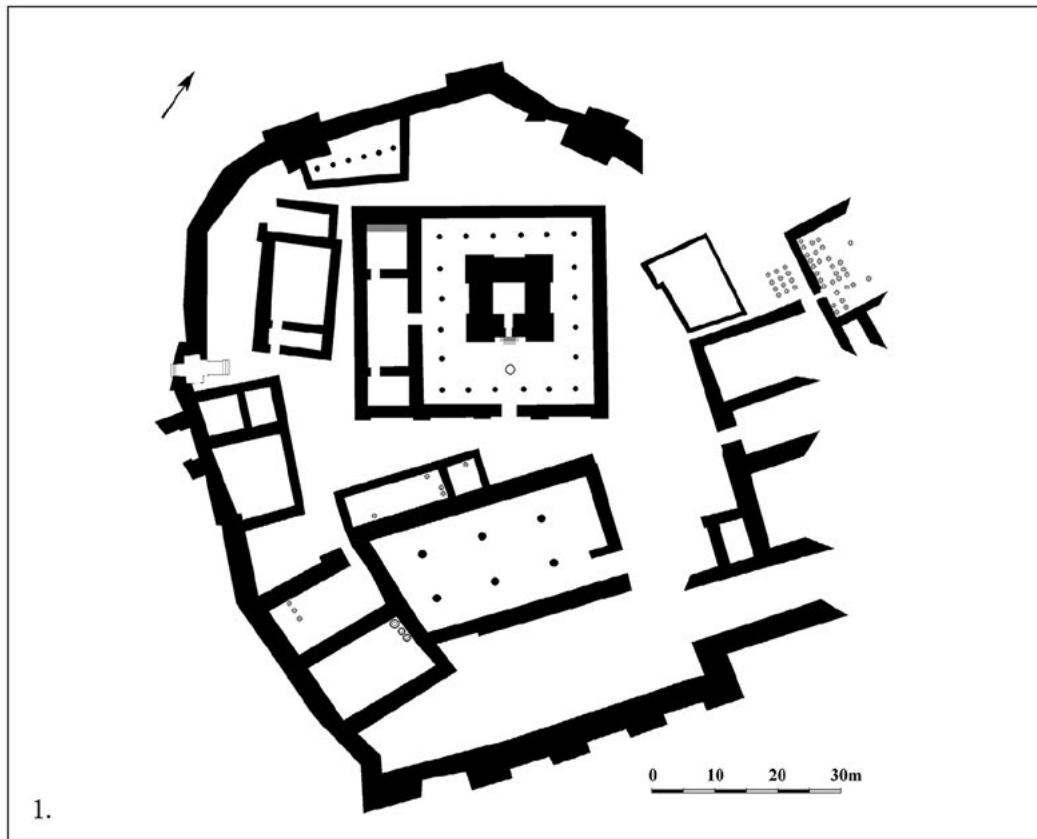


Figure 2.1. The 'citadel' of Altıntepe. Elaborated from Karaosmanoğlu and Yılmaz 2013-2014 [2014]: 121, Figure 1.

Figure 2.2. The 'citadel' of Ayanis. Elaborated from Çilingiroğlu and Batmaz 2014: 190, Çizim 2.

^{URU}irnunini, ^{URU}abasini,²⁵ ^{URU}š[...]^{URU}uḫi²⁶, ^{URU}uliš[...]^{URU}ini,²⁷ etc., were, in all probability, unfortified rural settlements.

Urartian 'City' from the Viewpoint of Archaeology

There is little doubt, that in Urartu the susi-temple formed the kernel, around which the Urartian 'city' was formed (Figure 2.1-2). The central position of susi-temple(s) is evidenced in all large imperial settlements recorded archaeologically (Menuahinili,²⁸ Aznavurtepe,²⁹ Livar,³⁰ Verachram,³¹ Qalatgah,³² Kayalidere,³³ Toprakkale,³⁴ Altintepe³⁵), in cuneiform inscriptions (Šušanc'/Kevenli),³⁶ or in both together (Anjav/Upper Anzaf,³⁷ Gorcot'/Körzüt,³⁸ Arin Berd,³⁹ Armavir,⁴⁰ Haykaber/Çavuştepe,⁴¹ Karmir Blur,⁴² Adilcevaz-Kef-Kalesi,⁴³ Bastam,⁴⁴ Ayanis⁴⁵).

Usually, a susi-temple was surrounded by an open yard and one or several rooms assigned for cultic ceremonies (probably, the structures called ^{NA}adanusa and ^Ésir(i)ḫani(ni); the latter was situated in front of the susi-temple (^Ésirḫanini susinika⁴⁶), as well as with adjacent structures that served mainly as storehouses or cellars.⁴⁷

The second important component after susi-temple in the 'city' is the so-called 'palatial' complex. In Urartian architecture, the 'palace', in many cases, meant a ceremonial-administrative section of the fortress, rather than a separate stand-alone architectural complex,⁴⁸ although such stand-alone complex is clearly identifiable at Erebuni. This phenomenon is especially typical of the town planning tradition of northern Mesopotamia, northern Syria and Asia Minor in the 2nd mill. BC.⁴⁹ In Urartian architecture,

the 'palace' was, probably, a large hall with columns or pillars, probably, the structure called ^Éašihusi in Urartian texts.⁵⁰ The new etymology suggested for this term indicates that it could be a 'ceremonial hall'.⁵¹ The importance of ^Éašihusi is particularly evidenced by the fact that the end of construction of this building in the city ^{URU}rusaḫinili ^{KUR}eidurukai was commemorated with naming the New Year after that event.⁵²

The 'palatial'-type structures were discovered or are expected to be found in all large Urartian centres.⁵³ First of all, in the capital of the Urartian great kings, the city of Tušpa (the so-called 'Old'⁵⁴ and 'New'⁵⁵ palaces) and in Argištihinili, where the 'palace' was found in the 'Western Citadel' consisting of 22 rooms with a total area of 4150m². The core of the complex is a rectangular-shaped columned hall measuring 660m² (Figure 3.2).⁵⁶ The 'palatial' section opened in Sardurihinili occupies an area of 2600m². As in the case of Argištihinili, here also the core of the complex is a rectangular hall with pillars, covering an area of 1215m² (Figure 4.1). The corridors stretching on its both sides connect the hall with the residential and secondary rooms of the 'palatial' complex.⁵⁷

At Erebuni an inner yard served as a centre of the palatial building, which was surrounded by other rooms.⁵⁸ At the same time it is necessary to note, that the mentioned inner yard is opening around the susi-temple and hardly can be considered as a 'ceremonial hall'. In all probability, the later was situated nearby of the inner yard, in the place of a large hall (480m²) with around 100 pithoi. The well-worked stone bases with one-line inscriptions of Argišti Menuaḫi mentioning construction of a 'house' (É), as well as the fragments of rich-decorated wall-paintings discovered there speaks about formerly different function of that building. In all probability, in the initial phase it was constructed as a 'ceremonial hall' and later was transformed into a large cellar for a reason unknown to us (Figure 4.2).⁵⁹

We have a similar planning in Ayanis with a difference that it has a 'peristyle' yard opened around the susi-temple surrounded by pillars (Figure 2.2).⁶⁰ Almost

²⁵ KUKN, 77⁹⁻¹³; CTU I, A 5-21⁹⁻¹³.

²⁶ KUKN, 406, Rev.²⁶; CTU I, A 11-2 Vo²⁶.

²⁷ KUKN, 76⁶; CTU I, A 5-20⁶.

²⁸ Aynur Özfiat, personal communication.

²⁹ Balkan 1960: 99ff.; 1964: 237ff., Figures 1-2; Boysal 1961: 200ff., Pl. 2.

³⁰ Kleiss and Kroll 1977: 57.

³¹ Kleiss 1974: 91, Abb. 11.

³² Kleiss and Kroll 1977: 71.

³³ Burney 1966: 68ff., Pls. 5-6.

³⁴ Erzen A. 1976-1977: 19ff., Figure 17, Table XI/2, XII/1-3.

³⁵ Özgüç 1963 [1964]: 45ff. / 53ff., Plan 2-3, Pl. XII-XIII; etc.

³⁶ Belli, Salvini 2004: 164ff.

³⁷ Belli 1999a: 24ff., Figures 14-16.

³⁸ Tarhan, Sevin 1976-1977: 283f., Figure 1.

³⁹ Hovhannisyan (Oganesjan) 1961: 31ff., Figures 12-14; idem. 1980: 49ff., Figures 39-40.

⁴⁰ Karapetyan 2010: 36ff., Figure 4.

⁴¹ Erzen A. 1976-1977: 6ff., Figures 8-12, Tables VII-IX; idem. 1978: 8ff., Table VIII/b.

⁴² Dan 2010: 44ff.

⁴³ Seidl 1974: 115ff.; Salvini 2004: 245ff.

⁴⁴ Kleiss 1972: 32ff., Abb. 27; Salvini 2005: 371ff.

⁴⁵ Çilingiroğlu 2001: 37ff., Figures

⁴⁶ See, e.g. CTU I, A 12-1 II¹⁰⁻¹¹.

⁴⁷ Batmaz 2015: 127ff.

⁴⁸ See and cf. also Forbes 1983: 42.

⁴⁹ Oppenheim 1964: 130. For recent discussion see and cf. Pfälzner 2015: 413-442.

⁵⁰ KUKN, 108-109, 111, 192, 265; CTU I, A 5-65A-C, A 8-30, A 9-20, A 12-10.

⁵¹ Wilhelm, Akdoğan 2011: 219ff.

⁵² CTU IV, CB Ay 51.

⁵³ For the 'palatial' type structures in Urartu see also Forbes 1983: 41ff., Figures 5-6, 11-13, 18.

⁵⁴ Tarhan 1994: 33, Figure 3; 2000: 161.

⁵⁵ Tarhan 1988: 374ff., Figures 1-15; 1994: 35ff., Figure 12; Tarhan, Sevin 1989 [1990]: 356f., Figures 1-4.

⁵⁶ See in detail Martirosyan 1974: 79ff., Figures 29-30; Ghafadaryan 1984: 68-77, Drawing 21.

⁵⁷ Erzen 1966 [1968]: 57; 1967: 469; 1978: 8ff.

⁵⁸ Hovhannisyan (Oganesjan) 1961: 27; Ghafadaryan 1984: 77. For detailed description see Hovhannisyan (Oganesjan) 1961: 24ff.

⁵⁹ Hovhannisyan (Oganesjan) 1980: 48-49, Figure 37.

⁶⁰ Cf. e.g. Çilingiroğlu 2001: 37ff., Figures 1-2, 26; Harmanşah 2009: 191f., Figure 3; etc.

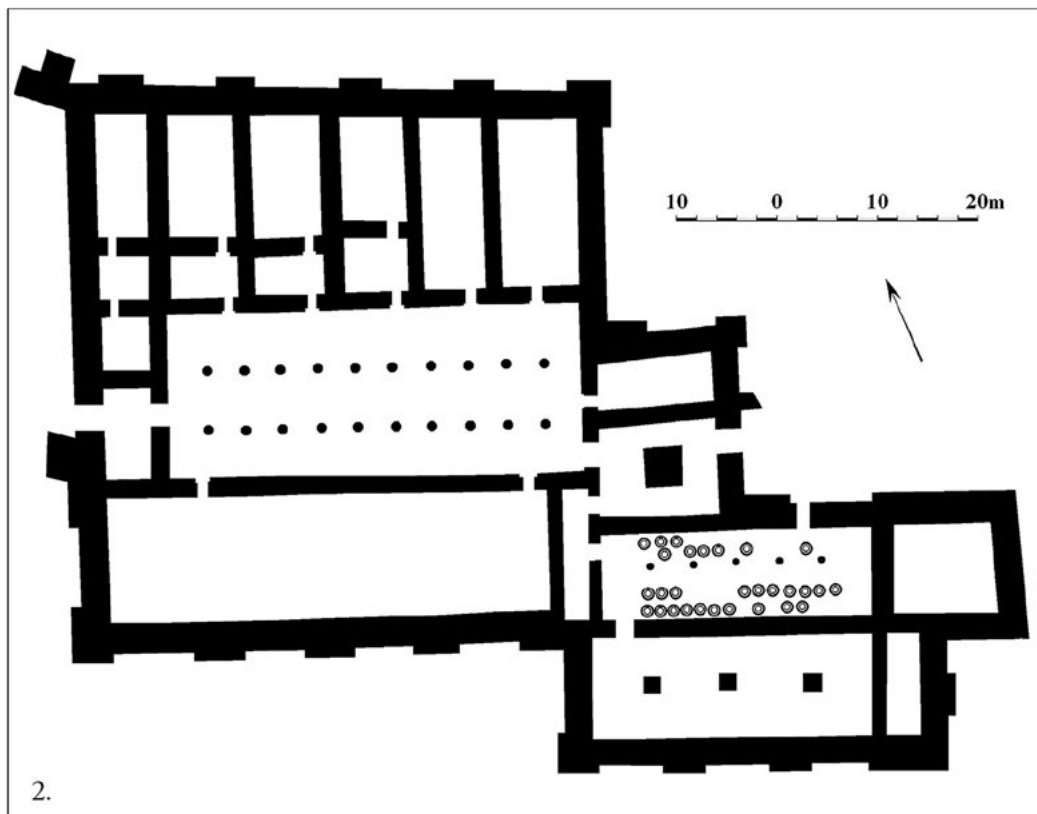
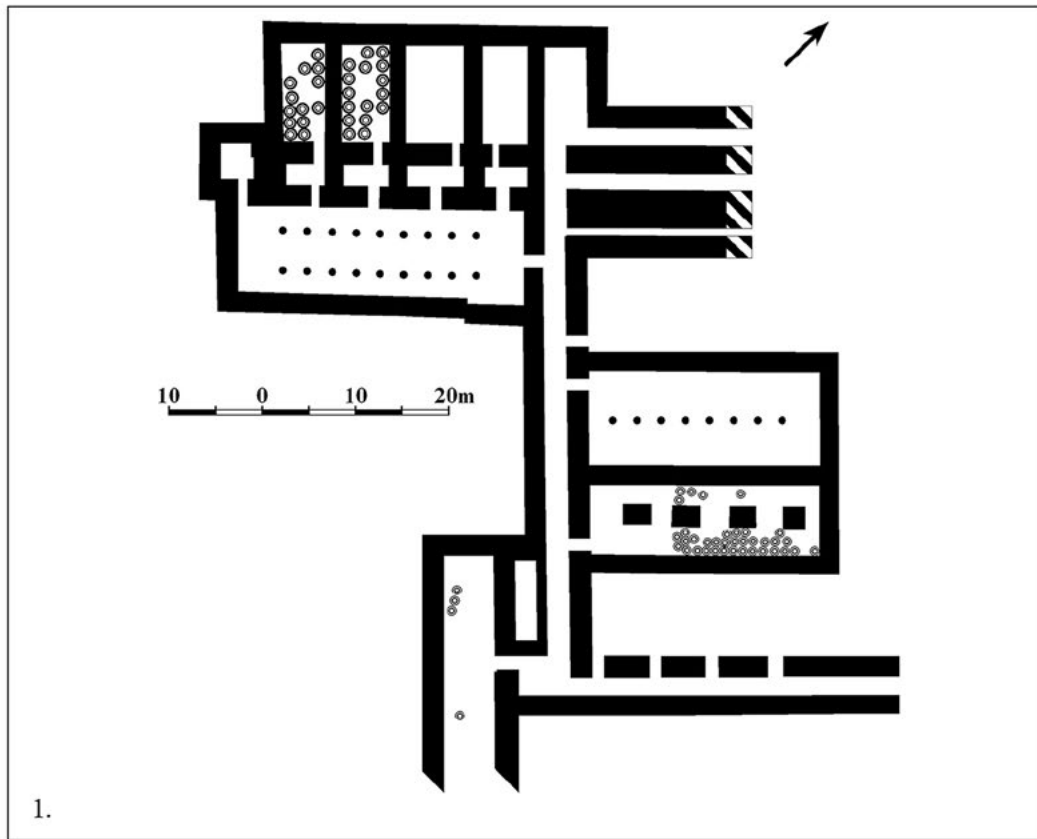


Figure 3.1. The 'palatial' complex at Upper Anzaf fortress. Elaborated from Belli 2008: 187, Çizim 2.
 Figure 3.2. The 'palatial' complex at the 'Western Citadel' of Armavir-Argištiñinili. Elaborated from Martirosyan 1974, Figure 30.

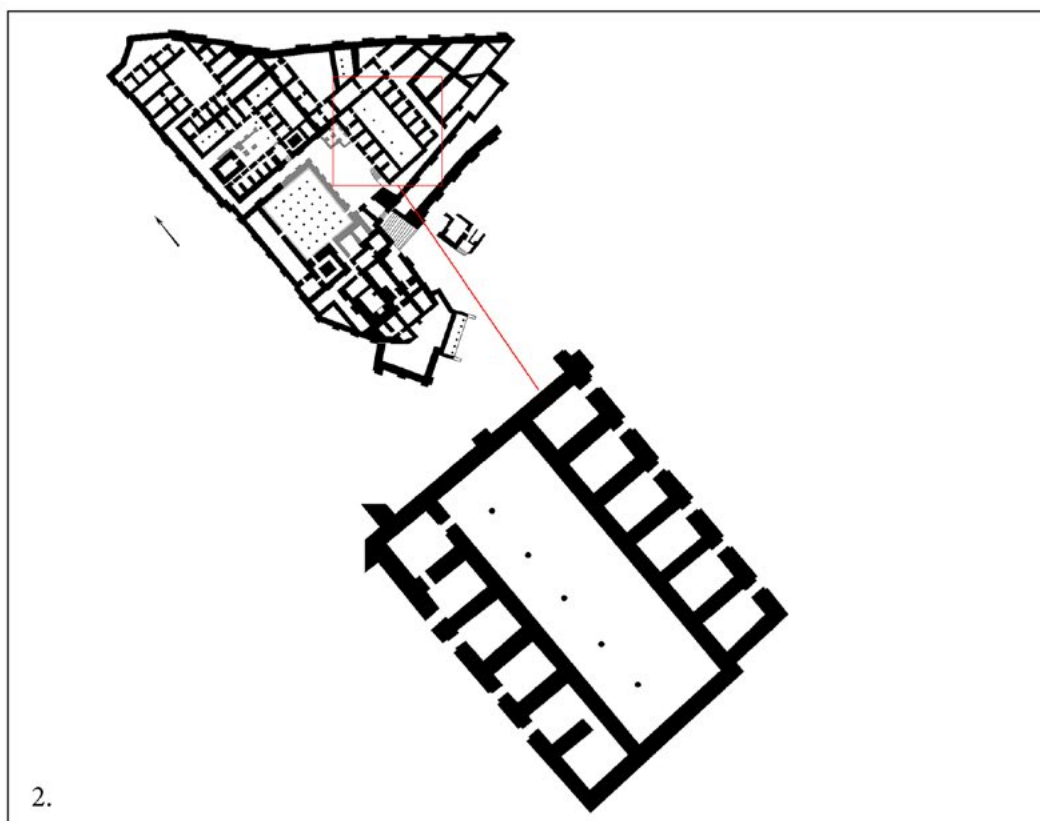
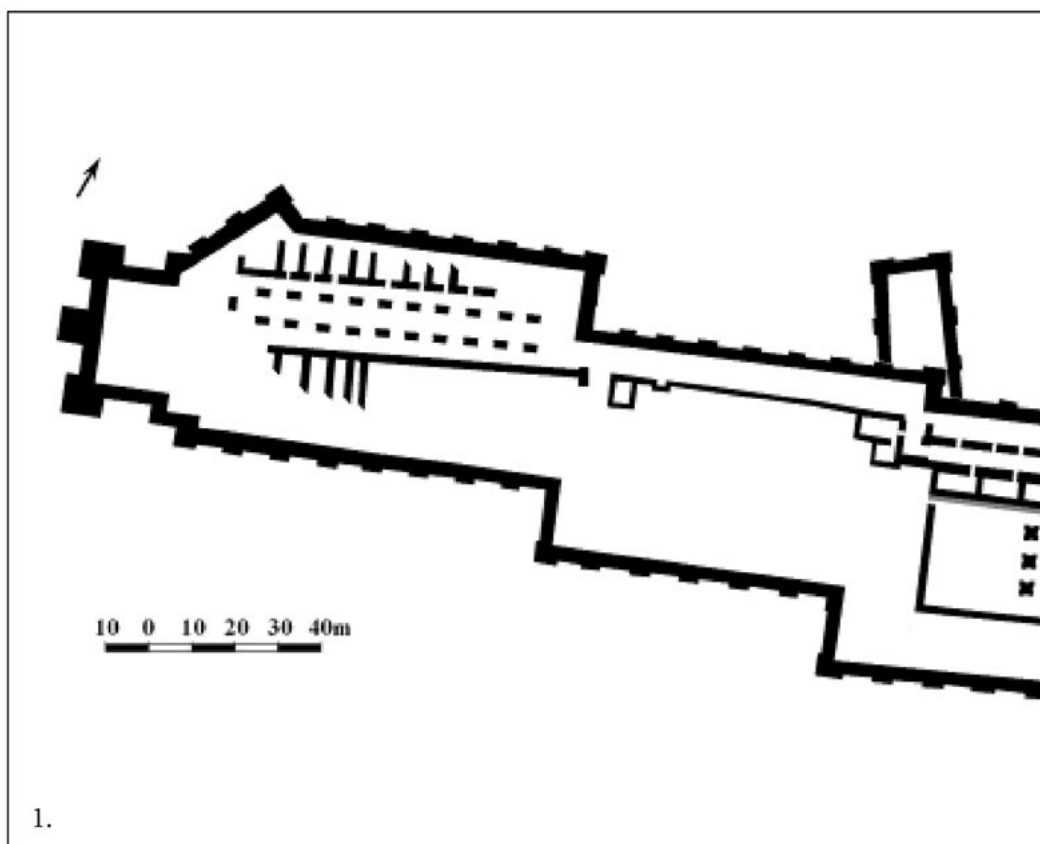


Figure 4.1. The 'palatial' complex at Sardurihinili fortress. Elaborated from Avcı 2013: 45 (Plan).
 Figure 4.2. The probable planning of the 'ceremonial hall' at Erebuni. Elaborated from Hovhannisyan (Oganesjan) 1980: 93, Figure 68.

nothing was preserved from the enormous 'palatial' section that occupied the second floor of the citadel of Karmir Blur, where the existence of a pillared hall around the susi-temple could be expected (Figure 5.1).⁶¹ Its planning is comparable with the picture that we have at Ayanis, although Karmir Blur is much more monumental. The existence of a columned hall is suggested for the 'palatial' section in Bastam, for the so-called 'Upper town' (Oberburg).⁶² A columned hall (238m²) was opened in Upper Anzaf fortress that was named the 'great reception hall' by its excavator. Along with seventeen adjacent rooms, it formed the 'palatial' section of the fortress (Figure 3.1).⁶³ Another large Urartian centre, the 'City of Ḫaldi of the land of Ziuquni,' also had a pillared hall with impressive stone sculptures (Figure 5.2).⁶⁴

The excavations that have been conducted during the last years at Altintepe uncovered an assemblage of buildings surrounding the columned 'peristyle' yard with the susi-temple in the centre (Figure 2.1).⁶⁵ A complex of 'palatial' dwellings was also excavated there.⁶⁶ The complex with a columned hall discovered in Haftavan tepe can be also considered as a 'palatial' type structure.⁶⁷ Lastly, the existence of a 'palatial' type complex in Qal'eh Isma'il Agha, where traces of a columned structure were also found, is quite probable.⁶⁸

Apart from secondary, household, or residential rooms occupying limited territory around the susi-temple and the large columned/pillared hall, the entire remaining area within the fortification walls was built-up with storehouses (ḫurišhi/ḫurišhushi), large cellars (É GEŠTIN), granaries ('ari), as well as with barracks and workshops. In fact, inside the known Urartian fortresses we have only two types of architectural complexes clearly displaying the characteristics of monumental architecture: the susi-temple and the compounds of buildings with columned halls or the 'palatial section'. Thus, we assume that the characterization of such a dual complex as a 'palace-temple' should not be contentious.

This dual architectural complex, or in other words the 'palace-temple', as we understand it, was called É.BÁRA (literally 'pedestal, sanctuary/shrine, divine throne room'⁶⁹). It is well known that Bastam, one of the largest Urartian centres, is called É.BÁRA in

its foundation inscription.⁷⁰ Another administrative centre, ^{KUR}rusaḫinili ^{KUR}qilbanikai, also appears as É.BÁRA in one of Urartian clay tablets.⁷¹ All this suggests that it would be inaccurate to see in Urartian texts a specific architectural-cultic structure under the sumerogram É.BÁRA, as we deal with complexes of buildings that display a certain degree of variability in architectural design.⁷² If we take into account that three out of eight known attestations of the sumerogram É.BÁRA in Urartian texts refer to the 'sanctuary/shrine' of the god Ḫaldi (ḫaldiei É.BÁRA),⁷³ then it can be suggested that any Urartian large city, be it Sarduriḫinili, the '(City of) Rusaḫinili in front of (mount) Eiduru', the '(City of) Rusaḫinili in front of (mount) Qilbani', or the 'City of Ḫaldi of the land of Ziuquni' can be considered, and most likely was viewed, as 'sanctuary/shrine' of the god Ḫaldi.

As a rule, the É.BÁRA was surrounded by strong fortification walls and was transformed into a fortress – É.GAL.⁷⁴ Together with the 'outer town' or a surrounding settlement this assemblage constituted the Urartian 'city'. In other words, the Urartian city consisted of a set of the É.BÁRA ('palace-temple'), É.GAL ('fortress' or 'fortification wall'), and URU ('town'). One of the largest Urartian centres of the 7th c. BC – Ayanis – appears exactly in this context. In the foundation inscription of that city the construction of a 'palace-temple', a 'fortress', and a 'town' is mentioned simultaneously:

... ieše ini É.BARA šidištubi eya É.GAL badusie šidištubi
... URU šuḫi ištini šatubi ... terubi tini ^{KUR}rusaḫinili
^{KUR}eidurukai '... I built this palace-temple, as well as
the magnificent fortress, ... laid a new town here, ...
named it Rusaḫinili in front of (mount) Eiduru'.⁷⁵

This picture is characteristic for all Urartian large urban centres. One may even insist on the possibility that the city building in Urartu was essentially identified with the building of (fortified) palace-temple, and the term 'city building' can be used only because of the inhabited area adjacent to that complex, the so-called 'outer town' or neighbouring settlement, the function of which was to serve the complex (Figures 6-7).⁷⁶ The Urartian city-building approach has deep roots and goes back to the northern Syro-Mesopotamian traditions of the second half of the 2nd mill. BC.⁷⁷ The

⁶¹ Forbes 1983: 52, Figure 27. For reconstruction see and cf. Dan 2010: 44ff., Figure 6.

⁶² Kleiss 1980: 303. For detailed description see Kleiss 1979: 80ff.

⁶³ Belli 2009: 755ff.; Belli et al. 2009: 92ff.

⁶⁴ Bilgiç, Ögün 1964 [1966]: 111f.; Forbes 1983: 52, Pl. 3, Figure 30.

⁶⁵ Karaosmanoğlu and Korucu 2012: 131ff.; 2013: 233.

⁶⁶ Karaosmanoğlu et al. 2014: 79.

⁶⁷ Burney 1972b: 139.

⁶⁸ Kleiss 1976: 29f., Abb. 12.

⁶⁹ Borger 1978: 143 (No. 344); Chicago Assyrian Dictionary 12, P, 2005: 145-153. (parakku A).

⁷⁰ KUKN, 419₁₋₂; CTU I, A 12-7₁₋₂.

⁷¹ KUKN, 412 лиц. стор. 6; CTU IV, CT Tk-1₆.

⁷² See also Erzen 1976-1977: 13f.; Zimansky 1985: 75; Salvini 2001: 259, n. 7; 2005: 374sq.; 2007c: 41sq. Cf. Hmayakyan 1990: 65ff.; Diakonoff 1991: 13, n. 3, 30.

⁷³ KUKN, 247₃, 424₁₂; CTU I, A 12-1 II₆₋₇, A 12-2 II, A 12-3₅.

⁷⁴ Compare, for example, foundation inscription of Ayanis: ieše e'a É.BÁRA e'a É.GAL badusi šidištubi (CTU I, A 12-9₅₋₆).

⁷⁵ CTU I, A 12-1 VI₄₋₉.

⁷⁶ See and cf. Hovhannisyan (Oganesjan) 1983: 138ff.; 1996: 92ff.; Tiratsyan and Koshelenko 1985: 24f.; Sinclair 1987: 13f.

⁷⁷ See and cf. also Bobokhyan 2016: 167-168.

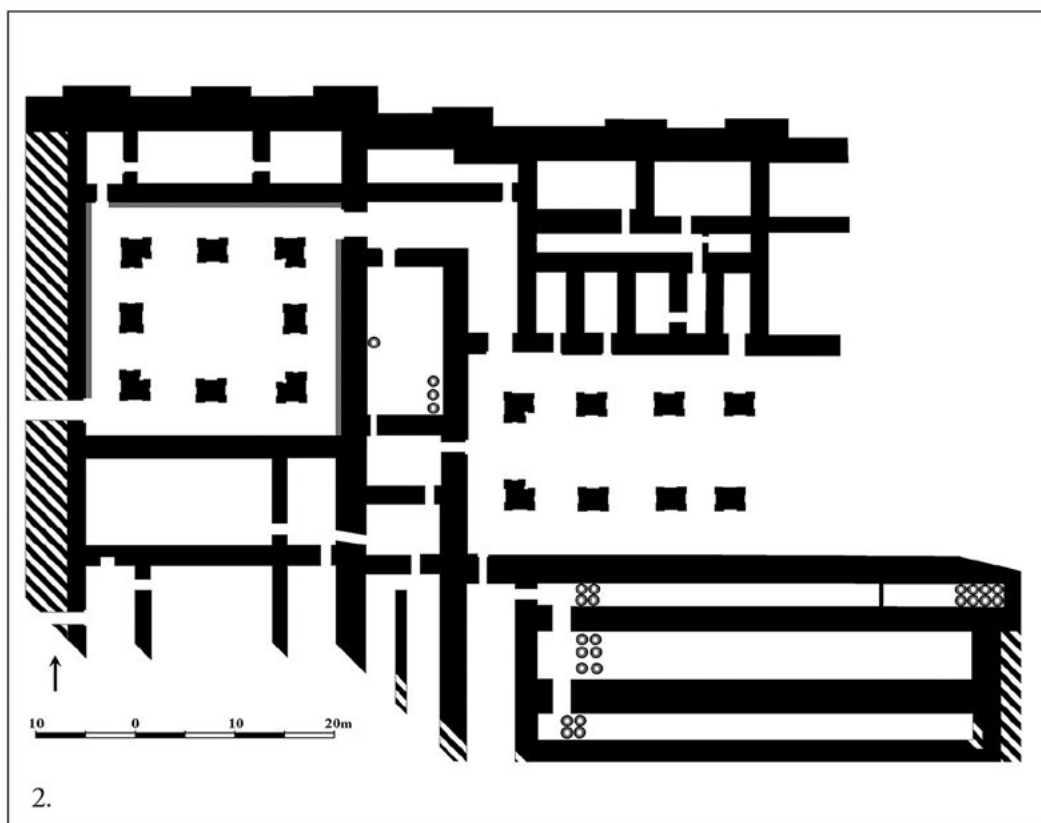
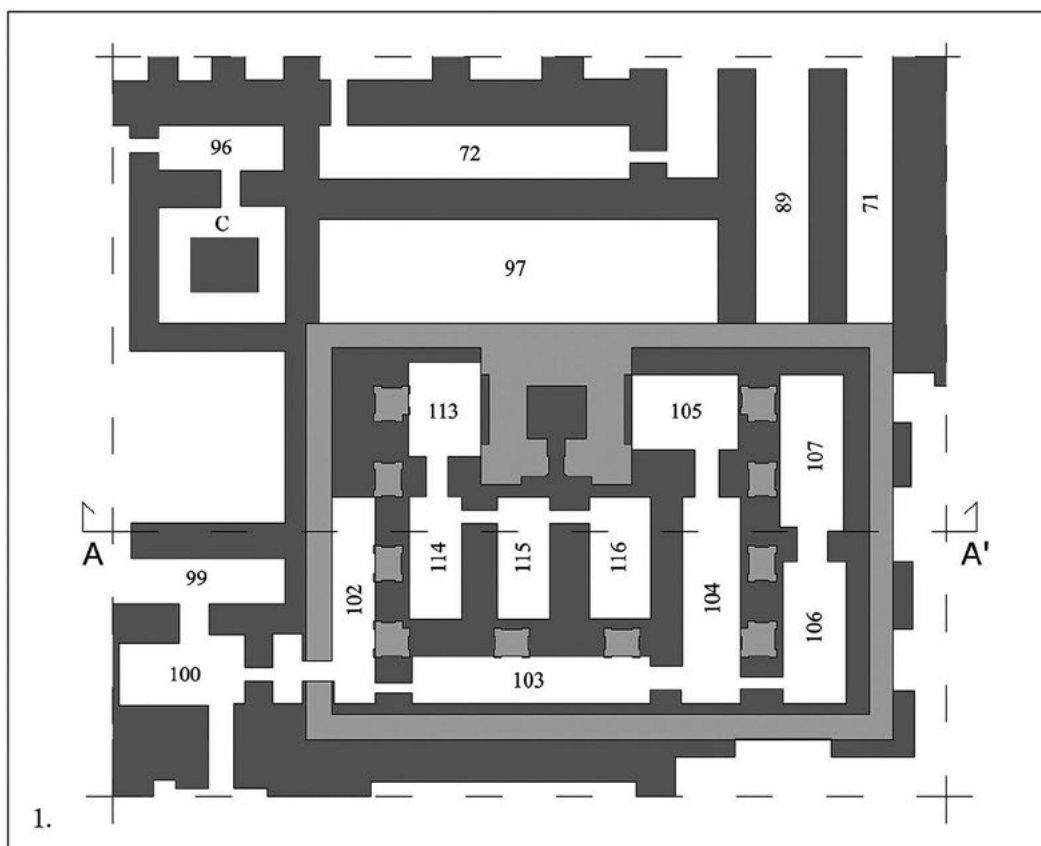


Figure 5.1. Reconstruction of the 'peristyle' yard with the *susi*-temple at Karmir Blur. After Dan 2010: 52, Figure 6.

Figure 5.2. The 'palatial' complex at Adilcevaz-Kefkalesi. Elaborated from Ögün 1982, Abb. 3.

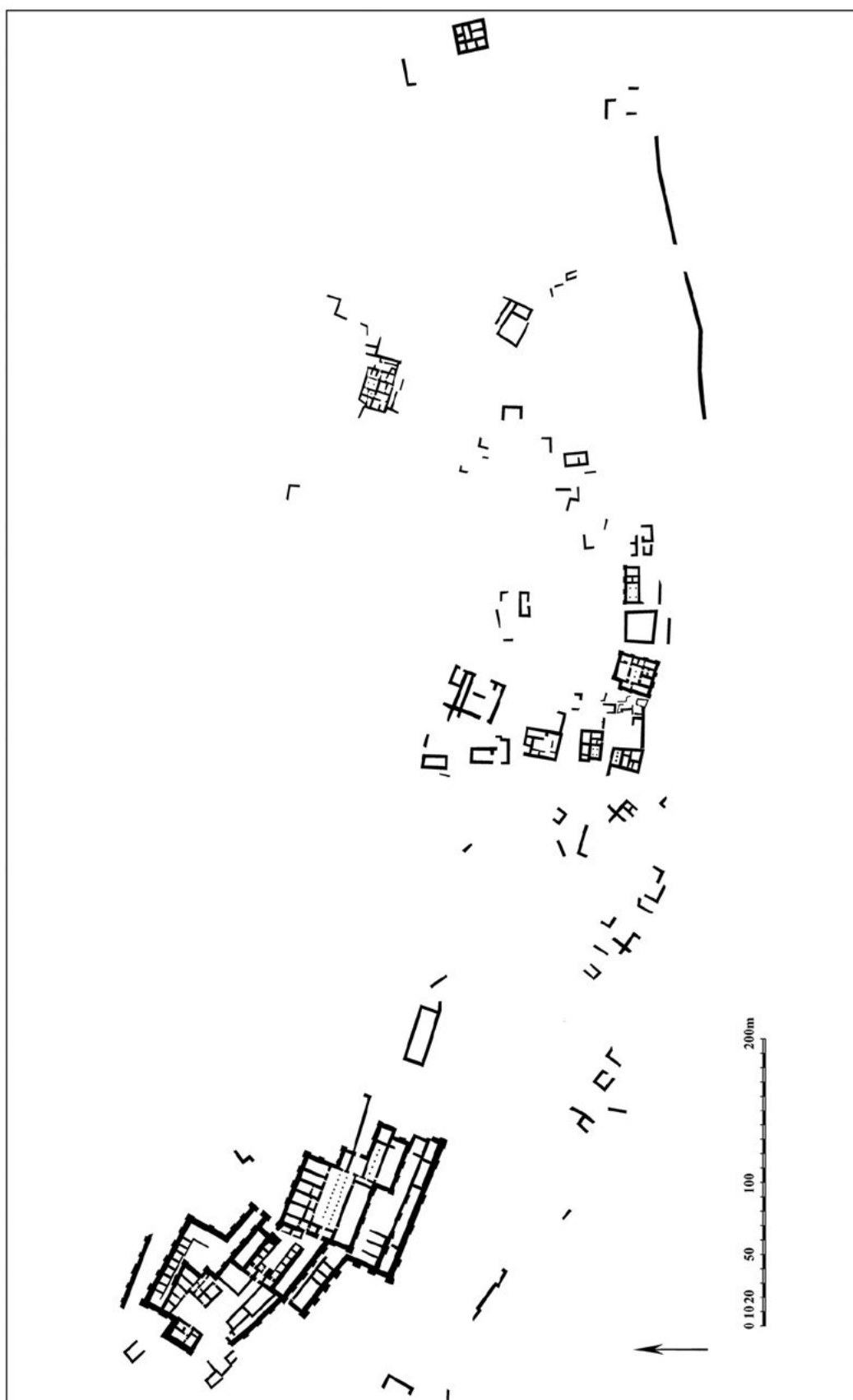


Figure 6. The 'outer town' spread underneath the 'Western Citadel' of Armavir-Argištišihinili. Elaborated from Ghafadaryan 1987, Figure 8.

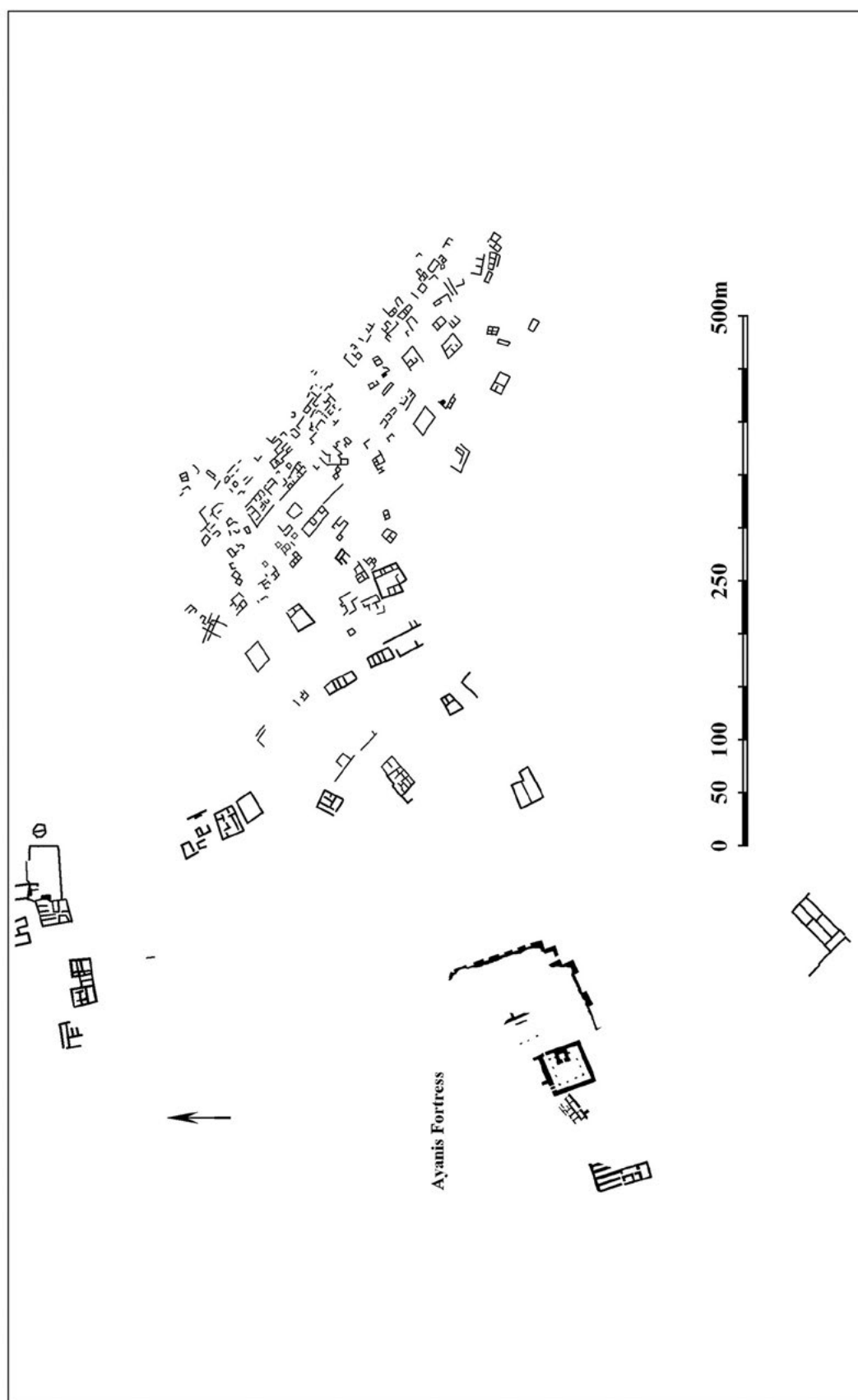


Figure 7. The 'outer town' and the citadel of Ayanis. Elaborated from Stone 2008: 153, Figure 8.9.

northern Syro-Mesopotamian town consisted of a citadel (Akk. *ki/erḫu*) where the temple was situated, and an indefensible 'lower town' (Akk. *adaššu*) spread over the area underneath the citadel.⁷⁸

This leads us to suggest that the Urartian city-building approach can not be seen as a continuation of the town-emergence process in the Armenian Highland during the Early Iron Age/Pre-Urartian period.⁷⁹ On the contrary, these processes were interrupted with Urartian conquests, and the subsequent establishment of the Urartian rule ushered the end of the Early Iron Age 'towns' in considerable parts of the Armenian Highland. In those rare cases when the Urartian fortress was built on the spot of a preceding Early Iron Age settlement, that settlement was usually demolished and the foundations of Urartian walls were often laid on the Early Bronze Age layer.⁸⁰

The palace/temple type of principal settlements stemming from the organization of the Urartian imperial state precluded the development of cities or large urbanized settlements where a concentration of large population would be possible. In most of the cases, the Urartian 'cities' did not have, apart from the citadel, outer city walls encompassing the entire settlement. The absence of such walls does not allow us to quantify the density of construction within the given urban landscape. This stands in stark contrast with the process of early urbanization detectable in Late Bronze-Early Iron Age settlements (cf. e.g. fortress-settlements at Lchashen,⁸¹ Hnaberd,⁸² Sangar⁸³ etc., Figure 8.1-2), where a presence of communal temples/sanctuaries has been attested (e.g. Metsamor,⁸⁴ Dvin,⁸⁵ Gegharot,⁸⁶ Shamiram,⁸⁷ Shirakavan,⁸⁸ etc.), together with an existence outside the citadel ramparts of intentional town-planning organized around squares wherefrom streets were extended toward the edges of settlement fortified by an external wall. Such town-planning pattern is characteristic of a gradually growing community and could be suggestive of an institutional organization characterized by elements of public governance (Ghazaravan⁸⁹).

The process of natural expansion of any Urartian urban centre caused by the gradual growth of its

population was thus far impossible to discern in the extant archaeological record. The construction of new buildings in major Urartian centres was most of the time intended to create more capacities for the growing demands of the state (mainly cellars and granaries). As for the rapid growth of population attested at almost all urban centres in the second half of the 7th century BC, i.e. during the last period of existence of the Urartian state, these developments should have resulted from different causes. The sufficiently documented fast constructions of simple dwellings reshaping the old town-planning and individual quarters and hasty efforts to fortify the defenceless 'outer towns' or urban blocks – these were not results of natural developments, but were conditioned by the deep crisis observable across the state during that period, just preceding the collapse of its socio-political organization.⁹⁰

House Building

House building and the shaping of domestic architecture in Urartu had been undertaken according to the principles and designs initiated by the state. Some of the residential structures excavated in large Urartian urban centres, apparently, were built by the state itself. These were expansive (from 250 to 780m²), uniformly built, multi-functional structures, consisting of 10-15 rooms. Condominium housing complexes and large individual residences are rarely attested in sparsely built areas of towns and cities.⁹¹ These were uncovered at Tušpa,⁹² Van-Karagündüz,⁹³ Karmir Blur,⁹⁴ Argištihinili-Armavir,⁹⁵ Haykaberd/Çavuştepe,⁹⁶ Ayanis,⁹⁷ Bastam,⁹⁸ Turki Tepe,⁹⁹ Qal'at,¹⁰⁰ Aragats¹⁰¹ etc. Such kind of houses, undoubtedly, was occupied by representatives of the Urartian elite.¹⁰² In this regard, it is apt to mention the names given to some of these mansions by excavating archaeologists: 'house of an Urartian nobleman' (Karmir Blur),¹⁰³ house of the 'seal-bearer', house of the 'marije' (Urartian pronunciation of the word *maryannu* – 'charioteer', 'nobleman'), house of the 'priest-healer' (Argištihinili-Armavir)¹⁰⁴ etc. (Figure 9.1-8, Figure 10.1-4). The fact that they were members of the Urartian military elite is proved by

⁷⁸ Oppenheim 1964: 131f.

⁷⁹ Cf. Bobokhyan 2014: 72f.; 2016: 168, 174.

⁸⁰ See in short Smith 2003: 166-168.

⁸¹ Martirosyan 1969: 14.

⁸² Smith *et al.* 2009: 302, Pl. 47.

⁸³ Mikayelyan 1966: 237ff., Figure. 3.

⁸⁴ Khanzadyan *et al.* 1973: 107-123, Figures 110-113.

⁸⁵ Kushnareva 1977: 11f., 14f., 36f., Tables IV, VII, XII-XIII, XXVIII, Figures 11, 18-19, 25, 58.

⁸⁶ Badalyan *et al.* 2008: 65ff., Figure 20; Smith, Leon 2014: 551ff., Figures 2-4, 7.

⁸⁷ Areshyan and Simonyan 1976: 286-287, Figure 2.

⁸⁸ Badalyan, Avetisyan 2007: 238.

⁸⁹ Areshyan and Ghafadaryan 1996: 71.

⁹⁰ Grekian 2009: 102ff.

⁹¹ Tiratsyan and Koshelenko 1985: 26; Hovhannisyan 1996: 128ff., Table 28-29; Hoffman 1978: 80ff.; Stone 2012: 91-92.

⁹² Tarhan 2005: 131.

⁹³ Sevin and Özfirat 2001: 142.

⁹⁴ Martirosyan 1961: 111ff.; 1964: 260ff.

⁹⁵ Martirosyan 1974: 104ff., Figures 38-39, 41-46; Ghafadaryan 1984: 94 ff., Drawings 30-37.

⁹⁶ Erzen 1978: 29, Figure 13.

⁹⁷ Stone 2008: 150, Figure 8.10; 2012: 89-92, Figure 06.01.

⁹⁸ Kleiss 1972: 36f., Abb. 31-32; 1977: 41ff., Abb. 31-33; 1978: 399; etc.

⁹⁹ Kleiss and Kroll 1977: 62-63, Abb. 11.

¹⁰⁰ Kleiss and Kroll 1978: 41-46, Abb. 17.

¹⁰¹ Hovhannisyan (Oganesjan) 1958: 81ff., Figures 2-4; 1996: 129, Table 23/b.

¹⁰² Martirosyan 1964: 264ff. Cf. Tiratsyan and Koshelenko 1985: 26.

¹⁰³ Martirosyan 1957: 88, Figure 2; 1958: 165; 1961: 116ff.

¹⁰⁴ Martirosyan 1974: 109, 112, 121, 133.

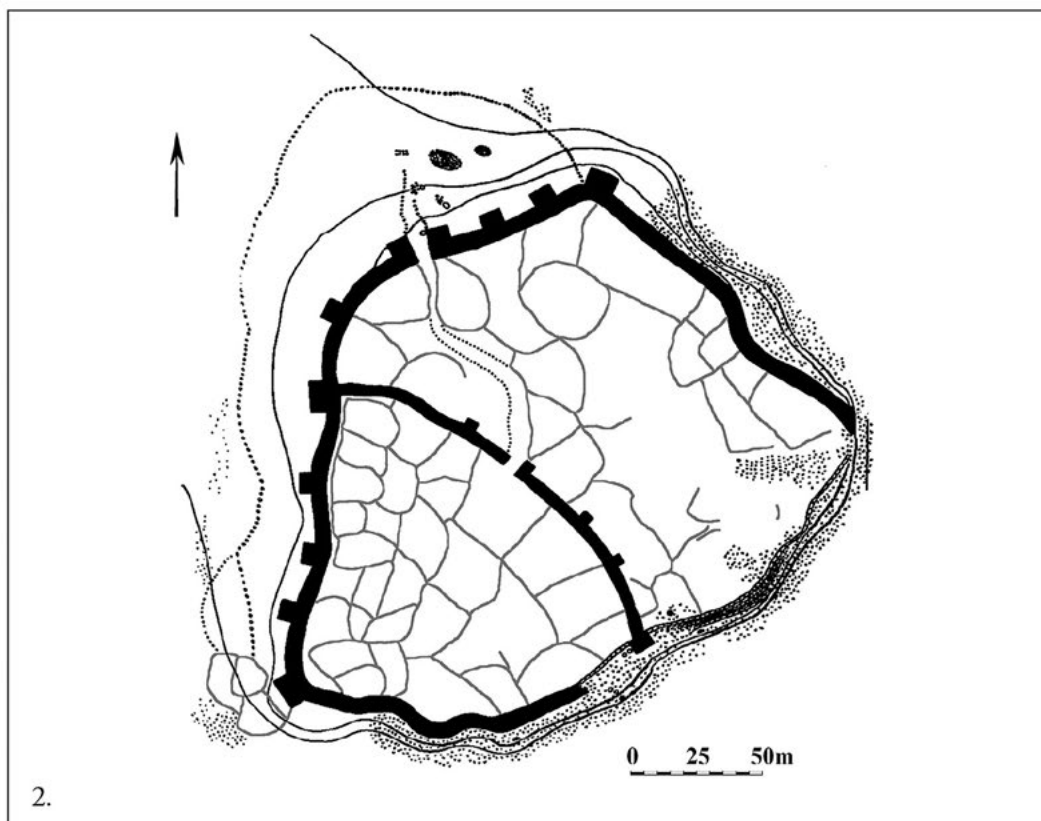
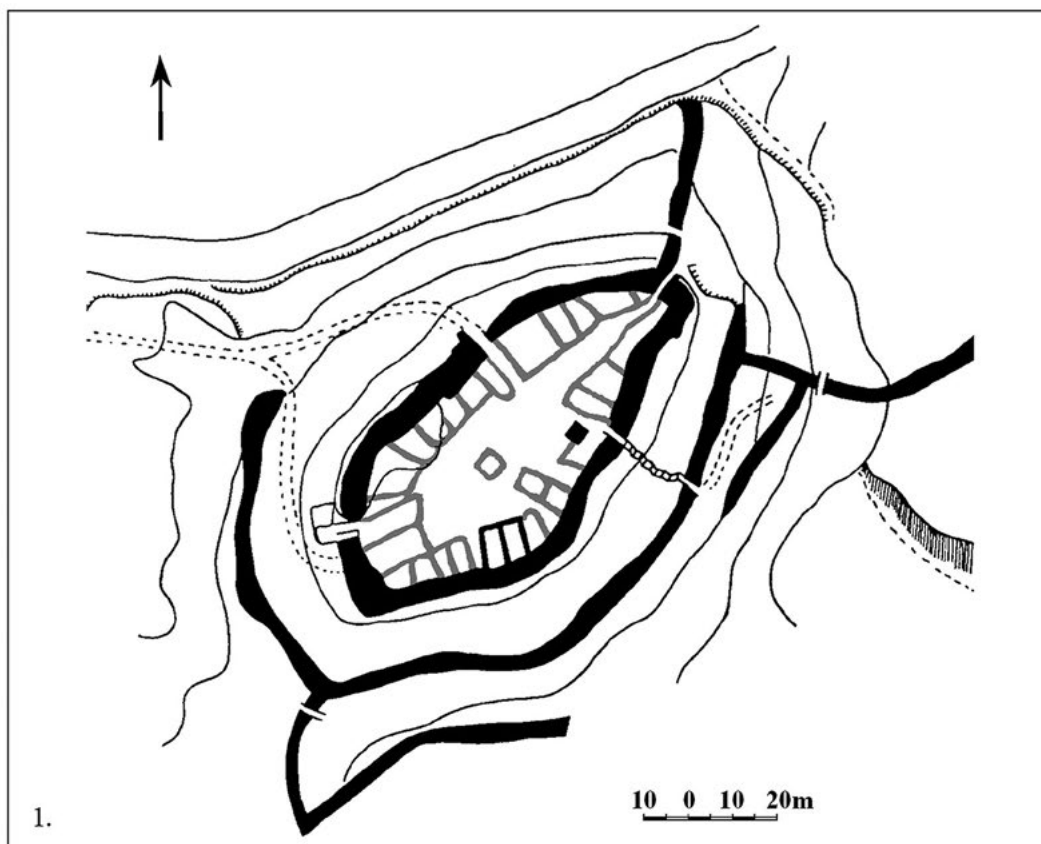


Figure 8.1. Plan of the Early Iron Age fortress of Lchashen, with the remains of dwellings inside the citadel.
Elaborated from Mikayelyan 1968, Figure 4.

Figure 8.2. Plan of the Early Iron Age fortress of Sangar, with the remains of dwellings inside the citadel.
Elaborated from Mikayelyan 1968, Figure 60.

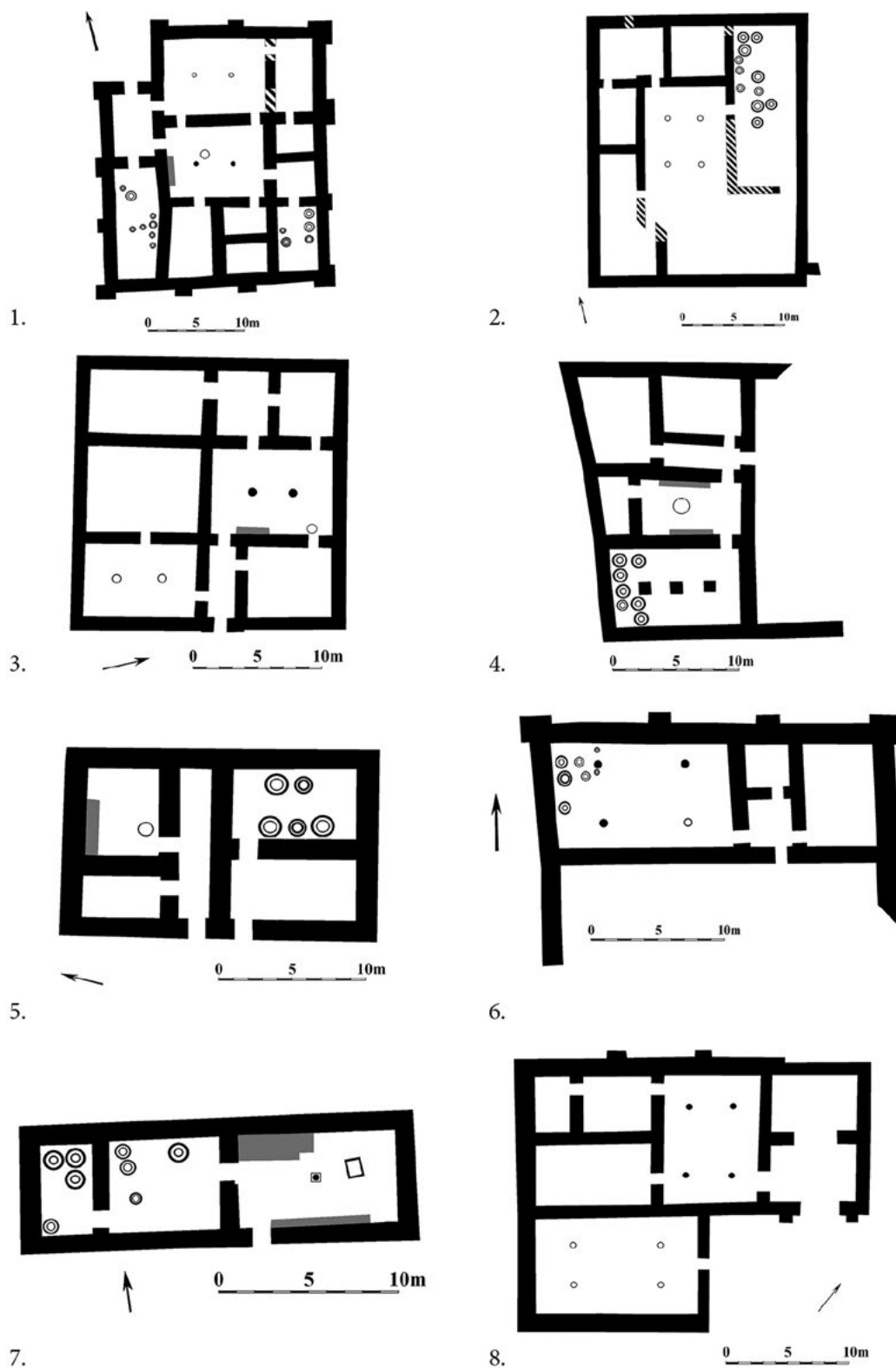


Figure 9.1-7. 'Elite' houses of the 'outer town' of Armavir-Argištil'inili. Elaborated from Ghafadaryan 1987: 94-114, Figures 30-32, 34-37 (Buildings No. 1-3, 5-6 and 8-9).

Figure 9.8. One of the 'elite houses' unearthed nearby of the citadel of Karmir Blur. Elaborated from Martirosyan 1964: 271, Figure 104.

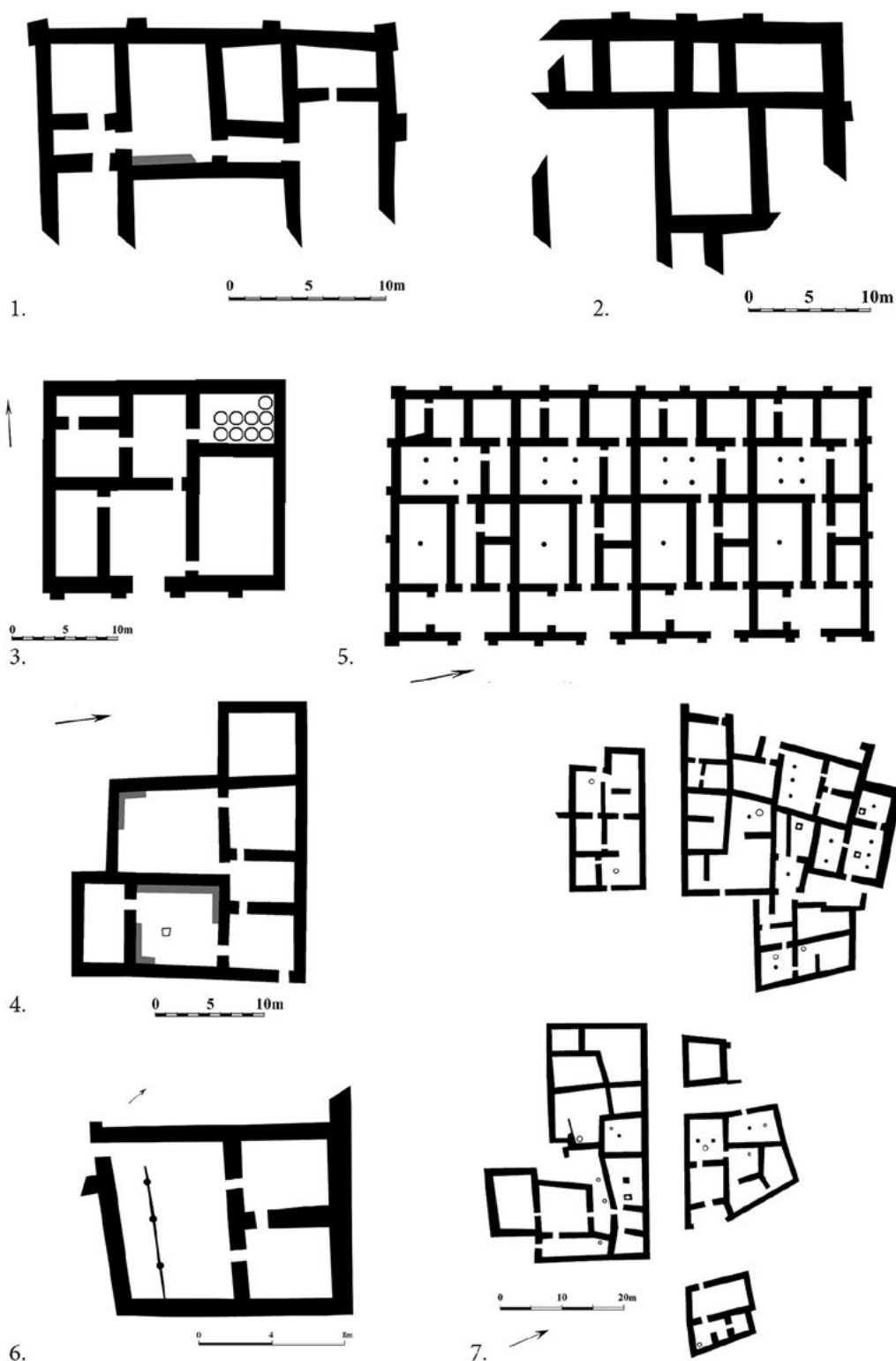


Figure 10.1-2. 'Elite' houses of one of the residential quarters of the 'outer town' of Ayanis. Elaborated from Çilingiroğlu 2012: 20-22, Çizim 1, 3 (Buildings No. 6 and 2).

Figure 10.3-4. Plans of houses unearthed in the 'outer town' of Bastam. Elaborated from Kleiss 1988: 23, 28, Abb. 12, 20.

Figure 10.5. Urartian 'state standard' multi-sectional building, excavated in the south-western part of the 'outer town' of Karmir Blur. Elaborated from Martirosyan 1964: 262, Figure 98.

Figure 10.6. Plan of two-roomed dwelling with on open/semi-covered yard unearthed in the 'outer town' of Karmir Blur. Elaborated from Hovhannisyan (Oganesjan) 1955: 26, Figure 9.

Figure 10.7. Plan of a residential quarter opened in the 'outer town' of Karmir Blur, built up along with one of the main streets of the city. Elaborated from Martirosyan 1961: 109, Figure 42.

discoveries of scale armour fragments that belonged to charioteers or heavily armed soldiers.¹⁰⁵ The discovery of military outfits in those private houses is remarkable. The same phenomenon was observed at Nuzi. Scale armour fragments were found from the mansions of local noblemen, the ‘maryannu’: Tehip-tilla, Šurki-tilla, Ziki and prince Šilvi-teššup.¹⁰⁶ Generally speaking, the private, often two-storey mansions of Nuzi warriors, with a footage of 100–300m² at the first floor,¹⁰⁷ are quite comparable to the houses of the Urartian elite.

One of the elite houses unearthed at Karmir Blur occupied an area of 500m². The residence had five rectangular rooms, one large, columned hall and a yard, with three-meter-wide entrance, which was probably intended for chariot (Figure 9.8).¹⁰⁸ The main room formed the core of the house, and the rest of dwelling and secondary rooms were arranged around it.¹⁰⁹ Typologically, this kind of houses is a continuation of Mitannian and Middle Assyrian dwelling architecture of the 2nd mill. BC reminiscent of the houses known from Nuzi and Aššur, which are mentioned in the literature as Mittelsaalhaus (Figure 11.5-8).¹¹⁰ Some of the Urartian ‘elite’ houses are typical reguliertes Agglutinat, a house with several, almost equal-sized rooms (Figure 9.3, 5, Figure 10.3-4).¹¹¹

The houses of Urartian elite demonstrate a monumentality typical of the Urartian architecture. These houses had had straight linear walls, decorated with buttresses, which were not intended to strengthen the walls, but were added solely as decorative features (Figure 9.1,6; Figure 10.1-3,5).¹¹² The best example of the Urartian ‘state standard’ is the large multi-sectional building, excavated in the south-western part of the ‘outer town’ of Karmir Blur. It occupies an area over 2200m² (62 × 33m), has a regular rectangular plan with external walls decorated with buttresses and additional tiny towers at the corners. Its internal design contained four identical units aligned along the longitudinal axis of the complex with separate entrances to and eleven rooms in each unit (Figure 10.5).¹¹³ The Urartian ‘state standard’ or elite houses are quite comparable with the elite houses found in Mitannian (Nuzi¹¹⁴) and Assyrian urban centres built by the state, as, for example, in the ‘Lower town’ II of Dūr-Katlimmu/Tell Šēḫ Ḥamad, an

Assyrian provincial centre on the left bank of the lower Ḥabūr river (Figure 11.1-4).¹¹⁵

It is noteworthy, that the town blocks built-up with these types of houses are situated closer to the fortress/citadel (Tušpa,¹¹⁶ Argištiḫinili-Armavir,¹¹⁷ Ayanis,¹¹⁸ Karmir Blur¹¹⁹), and sometimes had been surrounded by fortification walls transforming them into a ‘lower town’ (Argištiḫinili-Armavir,¹²⁰ Livar,¹²¹ Qal’at¹²²). Perhaps, in rare cases, some of those mansions could have been located within the limits of the fortress itself (Qal’eh Isma’il Agha (?),¹²³ Ayanis). In particular, some two-storey houses were located inside the fortress of Ayanis. Judging from the assemblages of artifacts found there, these dwellings belonged to members of the Urartian elite,¹²⁴ perhaps, the priests/functionaries serving in the fortress or the members of the royal family.

The location of the Urartian ‘elite blocks’ in the immediate proximity of the fortress finds interesting parallels in other areas of the Ancient Near East, particularly in Babylonia, where during the Middle Babylonian period the Kassite elite, mainly represented by charioteers, had been lodged around palace/fortresses.¹²⁵ The same situation can be observed at Nuzi, where the noblemen resided mainly in the palace or nearby.¹²⁶ Several Ugaritic texts enumerate dozens of charioteers (mryn), who lived in the royal palace.¹²⁷ ‘Elite houses’ of similar type were unearthed also at Ugarit.¹²⁸ It is noteworthy that one of the owners of these houses, Urtenu, was a charioteer, ‘maryannu’.¹²⁹

Creating a contrast with the large Urartian elite houses built by the state, the rest of the city was composed of much smaller dwellings structured in a more or less uniform manner, which were occupied by the majority of inhabitants. These were mainly two-roomed dwellings, up to 100m² in floor space, the doors of which opened toward a corridor or an open/semi-covered yard (Figure 10.6). Their walls were built of fieldstone with soft mud mortar. Some archaeologists

¹⁰⁵ Martirosyan 1974: 112, Figure 89b (10); Yesayan 1986: 48; Tarhan and Sevin 1990 [1991]: 434, Figure 22/4.

¹⁰⁶ Hulit 2002: 76ff.

¹⁰⁷ Jankowska 1981: 195ff.

¹⁰⁸ Martirosyan 1964: 268.

¹⁰⁹ Ghafadaryan 1984: 121.

¹¹⁰ Novák 1994: 399, Abb. 6, 8-9, etc.; 1999: 131ff., Figure 7.

¹¹¹ See and cf. Novák 1999: 131-132., Figure 6.

¹¹² Kleiss 1978: 399; 1979: 29f.; Ghafadaryan 1984: 95.

¹¹³ Martirosyan 1963: 221ff., Figure; 1964: 260 ff., Figures 98-99; Hovhannisyan 1996: 135-136, Table 31.

¹¹⁴ Novák 1999: 130f., Figure 5.

¹¹⁵ Kühne 2006-2008: 548, Abb. 3; 2011: 146, Figure 11.5.

¹¹⁶ Tarhan 2000: 163, Figure 10; 2003: 99f.; 2007: 118, Figure 1.1d.; 2011: 326ff.; Konyar 2011-2012: 180.

¹¹⁷ Martirosyan 1974: 104ff., 133, Figure 9; Ghafadaryan 1984, Drawing 8.

¹¹⁸ Stone and Zimansky 2001: 361, 363, Figures 5-12, 19-21; 2003: 214ff., 220, Figure 11.4-11.5; etc.

¹¹⁹ Martirosyan 1961: 106ff., Figure 42; 1964: 259ff., Figure 94.

¹²⁰ Martirosyan 1967: 221ff.; 1974: 42; Ghafadaryan 1984: 31; Hovhannisyan 1996: 100-101; Cf. Smith 1996: 238.

¹²¹ Kleiss and Kroll 1977: 54-57, Abb. 2.

¹²² Kleiss and Kroll 1978: 41-45, Abb. 17.

¹²³ Kleiss and Kroll 1977: 64-68., Abb. 16.

¹²⁴ Çilingiroğlu 2012: 9ff.

¹²⁵ Richardson 2011: 23.

¹²⁶ Drews 1993: 113 and n. 41.

¹²⁷ McGeough 2007: 104.

¹²⁸ McGeough 2007: 246ff.

¹²⁹ McGeough 2007: 300.

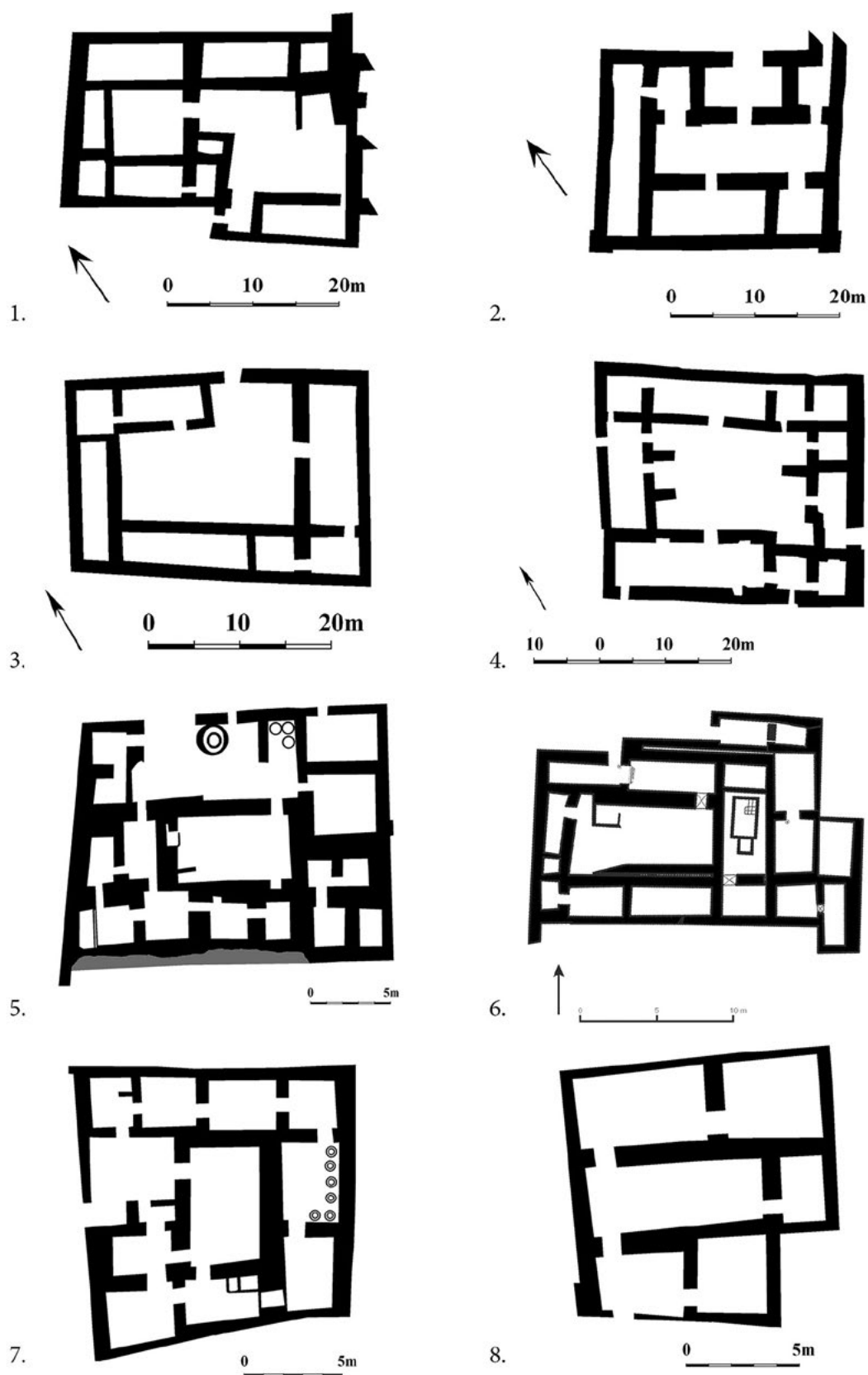


Figure 11.1-4. 'Elite' houses unearthed in the 'Lower town' II of Dür-Katlimmu/Tell Šeḫ Ḥamad. Elaborated from Kühne 1998: 303, Figure 11 (Nos. 1-2) and Kühne 2006-2008: 548, Figure 3 (Nos. 3-4).
 Figure 11.5-8. Mittelsaalhouses. Elaborated from Miglus 2011: 222, Figure 9 (No. 6); Novák 1994, Abb. 8, 32 (No. 8) and Novák 1999: 133, 137, Figures 7, 11 (Nos. 5, 7).

claim the absence of mud brick usage.¹³⁰ The blocks formed of this kind of houses had a higher density in comparison to the Urartian elite areas, but in general, building density of the Urartian urban centres yields considerably to the Syro-Mesopotamian norms (see below). At the same time the average sizes of Urartian houses and, especially, of the free-standing residences are remarkably larger than the average house size in Syro-Mesopotamian cities.¹³¹

The planning of residential blocks in the Urartian urban centres rarely demonstrates a more or less regular character. In particular, a part of the houses excavated at Karmir Blur was arranged along 6-10m wide, relatively regular intersecting streets (Figure 10.7). Both the 'outer towns' and the nearby settlements of the fortresses were built-up irregularly most of the time; there is no evidence of any town-building standard.¹³²

Unfortunately, little evidence concerning the development of the urban blocks of Tušpa, the capital city of the state has been preserved. It is probable that the 'lower town' at the foot of the citadel that occupied the Rock of Van was fortified¹³³ and built-up with standard state houses.¹³⁴ The 'outer town' could have been situated beyond the fortification walls. The so-called 'Tušpa-Höyük', to the north of the citadel, was built-up by structures of the Urartian period. Nowadays it is 70m wide and stretches for about 1km, which gives a very approximate idea about the area and building density of the city's suburb.¹³⁵

Areal Patterns and Dimensions of Urartian Cities and Towns

As mentioned above, there were different settlement types in Urartu: from small, rural, unfortified settlements to the fortified 'palace-temples', reminding urban centres. The practice of Mesopotamian archaeology allowed establishing a typological hierarchy of settlements based on their size, according to which a settlement occupying an area from 100 to 400 and more hectares could be called a 'city'; the size of towns is usually estimated around 40-50 and more hectares, and townships occupied between 5 and 25 and more hectares.¹³⁶ Such a classification indicates

only a clustering based on settlement size and could be inadequate for more profound sociocultural characterizations. For example we know that the city of Ur that was the capital of the Neo-Sumerian Empire at the end of the third millennium BC occupied an area that was less than 100 hectares, whereas the Hurrian Nuzi displaying all features of a city was less than five hectares in size. It must be taken into account that Syro-Mesopotamian urban centres included the whole fortified area, apart from the suburbs stretching beyond thy city walls.

Urartian 'cities' were open settlements, spread around the fortress or fortified 'palace-temple'. The latter occupied quite a limited area, usually between two and six ha (Upper Anzaf – 6ha,¹³⁷ Ayanis – 6ha,¹³⁸ Kayalidere – around 5ha,¹³⁹ Argištihinili-Armavir – around 4ha ('Western' citadel – around 2-2.2ha and 'Eastern' citadel – around 2ha¹⁴⁰), Haykaber/Çavuştepe – around 4ha ('Upper citadel' – 0.5ha¹⁴¹ and 'Lower citadel' – around 3ha¹⁴²), Karmir Blur – around 4ha,¹⁴³ Qiz Qal'eh (Evoghlu) – around 4 (3.1¹⁴⁴) ha,¹⁴⁵ Urartian fortress at Horom – 3.6ha,¹⁴⁶ Toprakkale – around 2.5ha,¹⁴⁷ Ereuni – around 2ha¹⁴⁸, Urartian fortress at Artashat – around 2.5ha etc.¹⁴⁹), in rare cases the fortified area of the 'palace-temple' occupies up to 10 hectares (Tušpa – around 8-9ha,¹⁵⁰ Livar – around 9 (6.1) ha,¹⁵¹ Qalatgah – around 10ha¹⁵²), and only three fortresses that are near or exceed 10ha (Bastam – around 30 (20.8) ha,¹⁵³ Verachram – around 24 (13.6) ha,¹⁵⁴ Qal'eh Isma'il Agha – around 16 (9.3) ha).¹⁵⁵

The total area occupied by an Urartian urban centre, including the territory of the 'outer town', usually did not exceed 40-50ha. In particular, the territory of

¹³⁰ Sorokin 1952b: 79ff.; Hovhannisyan (Oganesjan) 1955: 18ff., Figure 9a; 1996: 131-134, Table 30; Martirosyan 1957: 83ff.; Piotrovskij 1959: 175ff.; Forbes 1983: 119f., Figures 63, 67; Ghafadaryan 1984: 121.

¹³¹ Stone 2012: 92.

¹³² Tarhan, Sevin 1976-1977 [1977]: 286.

¹³³ Tarhan 1994: 39; 2000: 163; 2003: 98f.; 2005: 131.

¹³⁴ Tarhan 1994: 44, Figure 15; 2003: 98f.; 2005: 129, 131; Tarhan and Sevin 1990 [1991]: 434f., Figures 16-17; Tarhan and Sevin 1992 [1993]: 410f., Figures 10, 17-19; Konyar 2011-2012: 178; Konyar *et al.* 2012: 223f., Figures 9-10.

¹³⁵ Tarhan 2000: 162f.; 2003: 98f.; Konyar *et al.* 2012: 219ff.

¹³⁶ See and cf. Adams and Nissen 1972: 18; Algaze 2008: 103, 167ff. (Appendix I-II).

¹³⁷ Belli 1999a: 16.

¹³⁸ Çilingiroğlu 2011: 1055.

¹³⁹ Burney 1966: 63.

¹⁴⁰ Ghafadaryan 1967: 237; Martirosyan 1974: 44. Cf. also Smith 1996: 232, Table 5.4.

¹⁴¹ Sevin 2014: 228, Şek. 6.

¹⁴² Erzen 1978: 8.

¹⁴³ Martirosyan 1961: 91; 1964: 252: According to Adam Smith, the area of the citadel of Karmir Blur was around 3.1 ha. See Smith 1996: 294, Tab. 6.5.

¹⁴⁴ The first number is given taking into account the maximum length and width of the site, when an area occupied by the site is not mentioned in publications. The numbers in brackets are mentioned according to Zimansky 1985: 35, Table 2.

¹⁴⁵ Kleiss 1973: 87.

¹⁴⁶ Badaljan *et al.* 1993: 2.

¹⁴⁷ Erzen 1976-1977 [1977]: 18; Kleiss 1988: 31.

¹⁴⁸ Hovhannisyan (Oganesjan) 1961: 16. In his later work he noted that the territory of the citadel was around 8 ha (1980: 43):

¹⁴⁹ Tonikian 1992: 172. Cf. also Smith 1996: 258ff.

¹⁵⁰ André-Salvini and Salvini 2006: 261; Tarhan 2011: 289; Konyar 2012: 409ff.

¹⁵¹ Kleiss and Kroll 1977: 55ff.

¹⁵² Cf. also Zimansky 1985: 39.

¹⁵³ Kleiss 1980: 301; Kroll 2006-2008: 469.

¹⁵⁴ Kleiss 1974: 84.

¹⁵⁵ Kleiss and Kroll 1977: 66.

Karmir Blur covered around 40ha.¹⁵⁶ Urban quarters of Arin-berd¹⁵⁷ occupied the territory of 50ha.¹⁵⁸ A territory of 40-50ha is suggested for the Urartian settlement at Horom,¹⁵⁹ an area around 40ha was occupied by the Urartian settlement at Kayalidere.¹⁶⁰ The settlement that spread around the Urartian fortress of Aragats occupied an area of 30-40ha.¹⁶¹ The 'outer town' of one of the early Urartian centres, the fortress of Upper Anzaf, occupied a territory of about 14ha.¹⁶² The settlement at Norgel/Eski Norgüh that was protected by a small fortress occupied an area of around 20ha.¹⁶³ The settlement of the Urartian period at Geoy Tepe occupied an area of 24ha.¹⁶⁴ The settlement spread around Turki Tapa occupied around 9ha.¹⁶⁵ The 'outer town' of the large Urartian fortress at Livar occupied only 8ha, and same was the size of the fortified 'lower town',¹⁶⁶ making it in total around 16ha. The 'outer town' of the fortress of Gorcot'/Körzüt covered an area of 8-9ha.¹⁶⁷ The size of the settlement near Aliler fortress is about 4ha.¹⁶⁸ The built-up area of the settlement, adjacent to the large Urartian fortress of Verachram, was only around 3.5ha.¹⁶⁹

Only three centres covered an area of more than 50ha: Ayanis, Tušpa and Argištihinili. Among these three, the 'outer town' of Ayanis occupies around 80ha.¹⁷⁰ Tušpa, the capital city, approximately had the same size, though there is no exact data concerning the territory occupied by its 'outer city'. If we plausibly assume that the fortification walls of the Old Van City were laid along the outline of ancient Urartian ramparts,¹⁷¹

then it can be suggested that the 'lower town' of Tušpa could have occupied around 50ha¹⁷². If we add to this the territory of 'Tušpa-Höyük' and several adjacent suburbs,¹⁷³ it could be suggested that the urban sections of Tušpa had covered an area of 80-90ha in total. Keeping this in mind, one may suggest that the figure of near 1000 hectares estimated for Argištihinili-Armavir seems utterly exaggerated.¹⁷⁴ Although the hypothesis advanced by Koryun Ghafadaryan who estimated the size of the city around 400ha is more realistic,¹⁷⁵ nevertheless, this number also seems too high. Taking into account the location of this centre in a very fertile agricultural zone, it is reasonable to think that Argištihinili-Armavir could have occupied a much larger territory and could have had a relatively more numerous population in comparison to other Urartian centres. Still, it is hard to imagine that the built-up areas of that city exceeded 100-120ha,¹⁷⁶ and, most probably, this number was even smaller. Here we need to consider the evidence that the urban blocks located between the 'Western' and 'Eastern' citadels, which were encompassed by fortification walls for some period of time, enclosed a territory of no more than 50-60ha.¹⁷⁷

The urban blocks or adjacent settlements of other Urartian centres and fortresses occupied much smaller areas. Finally, it should also be mentioned that at least four large Urartian centres: Haykaber/Çavuştepe, Altintepe, Toprakkale and Kef Kalesi – had no 'outer towns' at all or, at least, these have not been recorded yet archaeologically. Kef Kalesi, though, had a 'lower town' that was fortified and occupied a territory of approximately 10ha.¹⁷⁸

Population Size and Density in the Urartian Cities

There is no known Urartian settlement, regarding which one could think of a concentration of more or less dense population in a relatively limited urban space, be that in a 'palace-temple' or 'citadel', in a fortified 'lower town' below the 'palace-temple' or in an 'outer town' spreading beyond fortification walls.¹⁷⁹ On the contrary, the existing data suggest that the inhabitants of the 'outer town' were mostly members of the fortress administration, temple personnel, garrison or service

¹⁵⁶ Piotrovskij 1950: 13, 17; 1959: 170; Sorokin 1952b: 79; Martirosyan 1964: 259; See also Hovhannisyan 1996: 103. Cf. Martirosyan 1974: 44 (700-800 ha, 50 ha of which was the area of the 'fortified inner town'); Tiratsyan and Koshelenko 1985: 24 (600-800 ha); Yesayan 1982: 13 (100 ha).

¹⁵⁷ The 'urban quarters' of Erebuni is studied casually and the traces of broad private residences (?) and irregularly built dwellings, consisting of several rooms have been recorded (Hodjasch 1982: 271): The traces of dwellings were recorded here during short-term excavations in 1998 (Ter-Martirosov 2008: 152ff.): For the rectangular extended structure excavated in 2007 on the mound, to the south-east of the citadel, see Stronach *et al.* 2009: 182ff., Fig. 2, Plates 1-4): Among the last researched see also Herles and Fassbinder 2015: 292ff.

¹⁵⁸ Hovhannisyan (Oganesjan) 1961: 15. In his further publications, however, Kostantin Hovhannisyan mentioned 200 ha. This number can not be confirmed with any reliable data and, as we think, is also exaggerated. Cf. Hovhannisyan (Oganesjan) 1980: 33; Dan and La Farina 2012: 254.

¹⁵⁹ Badaljan *et al.* 1994: 1.

¹⁶⁰ Avetisyan and Bobokhyan 2010: 52.

¹⁶¹ Avetisyan 2001: 9. Cf. Hovhannisyan (Oganesjan) 1958: 80; 1996: 101.

¹⁶² Burney and Lawson 1960: 180; Belli 1999a: 16; 1999b: 508.

¹⁶³ Tarhan and Sevin 1976-1977 [1977]: 287ff., Figure 2, Table XX.

¹⁶⁴ Biscione 2003: 171.

¹⁶⁵ Kleiss and Kroll 1977: 62f., Abb. 11.

¹⁶⁶ Kleiss 1971: 55ff., Abb. 8; 1976: 42; Kleiss and Kroll 1977: 55ff., Abb. 2-3, 57.

¹⁶⁷ Tarhan and Sevin 1976-1977 [1977]: 285ff., Figure 1, Table X; Özdemir *et al.* 2013: 980.

¹⁶⁸ Sevin 2004: 373.

¹⁶⁹ Kleiss 1974: 87sq.

¹⁷⁰ Çilingiroğlu 2012: 18ff., Figure 23; Stone and Zimansky 2004: 233ff.

¹⁷¹ Tarhan 2005: 129f.

¹⁷² An area of Old Van city is around 46 ha: See Konyar and Avcı 2014: 205.

¹⁷³ See in short Tarhan 2007: 118.

¹⁷⁴ Martirosyan 1972: 39; 1974: 24. Initially, he mentioned the territory of 400-500 ha. See Martirosyan 1964: 233; 1967: 222. Cf. also Hovhannisyan 1996: 94.

¹⁷⁵ Ghafadaryan 1967: 237.

¹⁷⁶ Cf. Hammer 2014: 768.

¹⁷⁷ See Martirosyan 1972: 41.

¹⁷⁸ Zimansky 2005: 237.

¹⁷⁹ See already Zimansky 1995: 105-106; Ayvazian 2012: 892.

staff, whose subsistence needs were satisfied by the state through a redistribution system.¹⁸⁰

Thus, the reconstructable lifeway in an Urartian city, cannot suggest an autonomous development of a community, the members of which could have an inalienable private property and could be engaged in unregulated economic activities. A city that would have its own square(s), markets, communal temples/sanctuaries etc., is not identifiable among the Urartian urban centres. That is the likely reason why urban blocks of the large Urartian centres occupied limited areas, why they were not distinguished by dense planning, and why at least a considerable part of the population had not established self-sufficient, privately run households.

The best example of the aforementioned is Bastam. It could be estimated that this large Urartian centre with the fortified area extending over 30ha, had a garrison and administration staff with no more than 600-700 people. Bastam's 'outer town' covered a territory of another 18ha.¹⁸¹ It was an unfortified open-type settlement and, despite being relatively densely built-up, the dwellings identified there could house no more than 700-800 inhabitants, including women and children. Thus, the whole population of Bastam, along with its garrison and administration, supposedly consisted of no more than 1500 people.¹⁸² These calculations could indicate that, the average density of the population in Bastam was 30-40 people per one hectare. If up to 700-800 people indeed lived in the 'outer town' of Bastam occupying an area of 18ha, then the population density here would be 39-45 people per one hectare. In the case of Bastam, this number could be overstated, if we take into account that the 'outer town' consisted of no more than 50-60 houses, averaging 3-4 houses per one hectare. In that case, the suggested number of inhabitants per household would exceed 10, which seems to be on the high side.¹⁸³

No more than fifty 'private' mansions are identified in the three sections covering the 50-60ha area that stretches for 3.5km between the two citadels of Arğištihinili-Armavir. These 'private' residences were located along the main road connecting the two citadels to each other.¹⁸⁴ Here the density of the 'elite houses' is less than one mansion per one ha. By comparison, Nuzi of the Mitannian period, occupying an area around 4.4ha, consisted of a little more than

40 large residential complexes with the exception of the temple and the palace.¹⁸⁵ Thus, the main difference between Arğištihinili-Armavir and Nuzi is in the building density: it was much higher at Nuzi, averaging 10 mansions per one ha, which is incomparably higher than at Arğištihinili-Armavir.

The number of quite densely built dwellings recorded in the better-preserved section (around one ha) of the settlement adjacent to the fortress of Gorcot'/Körzüt, is around 10.¹⁸⁶ Counting on average five inhabitants per household, and suggesting the same building and occupation density for the other sections, we would come up with a number around 400-450 inhabitants for the whole settlement occupying the territory of eighth to nine ha. The example of Başıru (Tell Bazi) yields more data for estimating construction density and the number of inhabitants in a settlement occupying up to ten ha. This Mitannian-era settlement consisted of a citadel (where the temple was located) and two blocks of the 'outer town', spread below the citadel. In the excavated part of the so-called Weststadt (around four ha) 50 densely built houses of a uniform type were uncovered (the whole settlement had around 75-80 houses). Thus, adding the surface occupied by roads and the presence of a square, the density of houses could be estimated at 12 to 13 per hectare,¹⁸⁷ which means that this block hardly could accommodate more than 400-500 inhabitants.¹⁸⁸

Duçgagi is a good example representing an Urartian settlement. Its main block occupied the territory of 360 × 260m located on a triangular promontory. It is fortified from the only accessible southern side by a 96 meter-long wall strengthened with buttresses. The 'suburb' (360 × 115m)¹⁸⁹ was located beyond fortification wall. In total, this settlement occupying about seven ha¹⁹⁰ had approximately 50 houses, with 300 inhabitants.¹⁹¹ The estimated average density of occupation is 43 people per one ha and around 7 houses for every hectare. We must also take into account that Duçgagi, like the settlement, adjacent to the fortress of Gorcot'/Körzüt, was densely built up (Figure 12).

The next example of an Urartian settlement is Qal'at.¹⁹² The settlement surrounding the citadel occupies an area approximately measuring 3.5ha (255 × 135m)¹⁹³, while

¹⁸⁰ Sorokin 1952a: 128ff.; Martirosyan 1957: 83.

¹⁸¹ Kleiss 1972: 34ff., Abb. 28-29; 1976b: 33; 1977: 39ff., Abb. 30; 1979: 26ff., Abb. 16, 18; 1988: 19f.

¹⁸² Kleiss 1980: 301.

¹⁸³ For the number of members in one family see Wiggermann 2000: 190 (4 persons). Cf. also Zorn 1994: 33 (in average 4-5.5 persons): The average number of members in one family in Ugarit is 5.25 persons. See Garr 1987: 31ff. See also Adams 1981: 144.

¹⁸⁴ Martirosyan 1974: 104; Ghafadaryan 1984: 35ff., Drawings 8-9.

¹⁸⁵ Maidman 1995: 937.

¹⁸⁶ Tarhan and Sevin 1976-1977 [1977]: 285ff., Figure 1, Table X. Cf. also Özdemir *et al.* 2013: 980.

¹⁸⁷ Otto 2014: 85f.

¹⁸⁸ Cf. also Wossink 2009: 58.

¹⁸⁹ Kleiss and Kroll 1978: 36-41.

¹⁹⁰ For the territory occupied by the settlement, see Zimansky 1985: 35, Tab. 2.

¹⁹¹ Kleiss and Kroll 1978: 41.

¹⁹² Kleiss and Kroll 1978: 41ff., Abb. 17.

¹⁹³ An area of the settlement is 4.1 ha according to Paul Zimansky (1985: 35, Tab. 2).

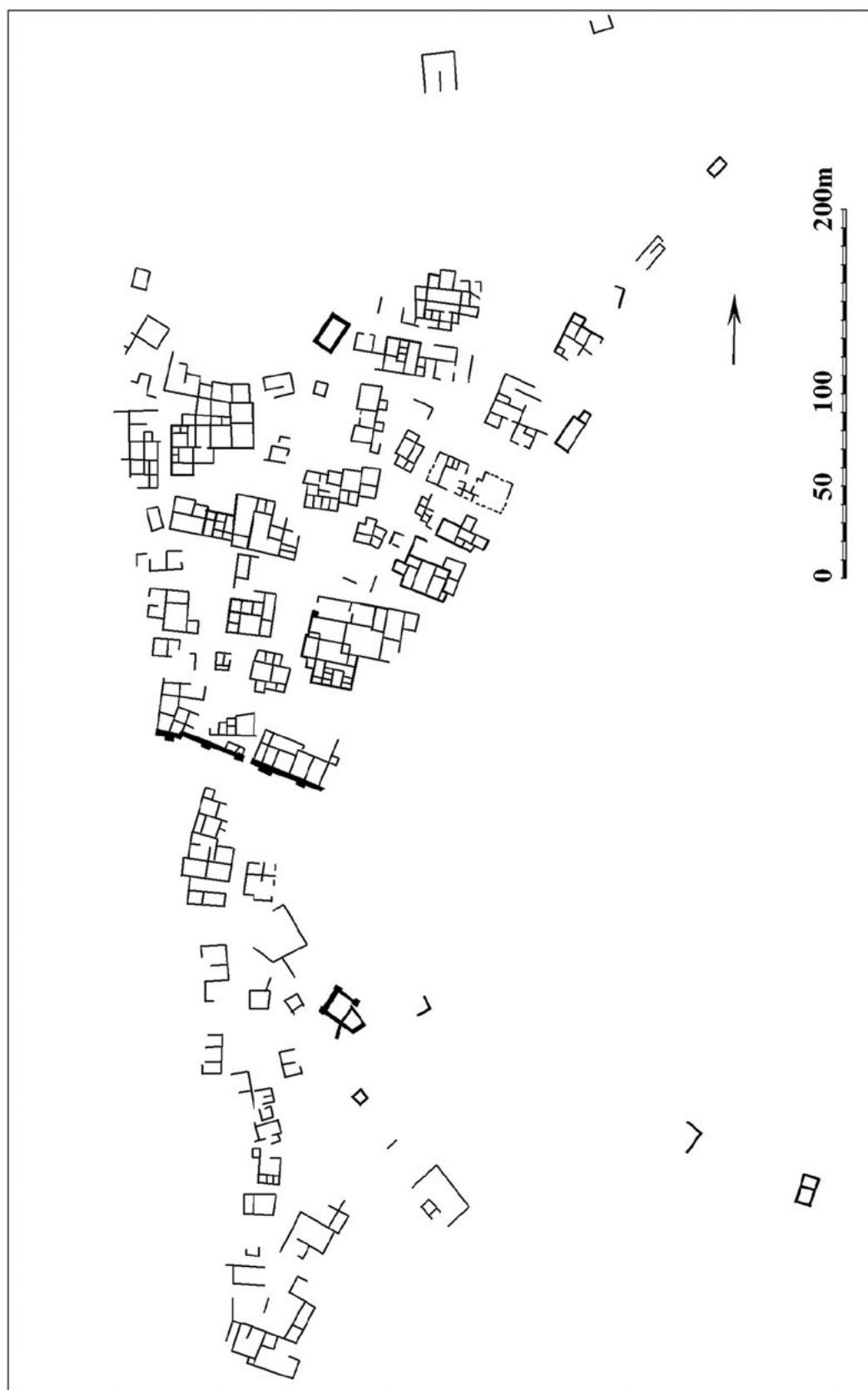


Figure 12. Urartian fortified settlement at Dučgagi with a 'suburb' beyond the fortification wall. Elaborated from Kleiss and Kroll 1978, Abb. 14.

the 'suburb' was spread beyond the outer fortification wall of the settlement. Several houses were excavated in the fortified area. The intervals between these houses provide an insight into the general principles of settlement planning. Concluding that there were nearly 50 houses in Dučgagi (seven ha), it could be suggested that Qal'at consisted of no more than 20-25 houses, with a population not exceeding 120-150 people.

The settlement of Qal'eh Kamana, dated to 8th century BC, occupies an area close to 1.5ha (150 × 105m).¹⁹⁴ It is a small settlement, with only five inhabited complexes situated nearby the Urartian castle. It had up to 50 inhabitants.¹⁹⁵

Summarizing the aforementioned, we notice that no Urartian city or town stands out with its high density of residential construction. Most 'outer towns' were occupied by houses and apartments of the elite. It could be suggested with certainty that the estimated average density of four to five houses and 20-30 inhabitants per one ha of such areas would be quite realistic. This number would increase for the densely built sections of 'outer towns' and smaller settlements, reaching up to eight to ten houses and 40-50 inhabitants per ha. On average, six to eight houses and 30-40 inhabitants per one ha can be estimated for the building density and population size of Urartian settlements. Meanwhile, the range of population density in Mesopotamian towns is estimated to be between 100 and 500 people per one ha, which takes into account the density of planning, number of stories of the houses, living space of houses, living area of the settlement, the potential of agricultural territory and water resources.¹⁹⁶ As a median measure, the number of 100-200 people per one ha is accepted.¹⁹⁷ Undoubtedly, here we deal with much higher numbers and different levels of urbanization in comparison with the Urartian reality.

Taking the population density of the Urartian settlements given above as the basis for calculating the number of people that inhabited, the urban blocks of Karmir Blur, which occupied an area close to 40ha, a figure of no more than 1200-1600 inhabitants can be suggested.

The citadel of Karmir Blur occupies an area of around four ha, including a large inner courtyard. Since the first floor/basement of the enormous palatial-religious building was completely occupied by large storage spaces, including cellars and granaries, as well as some

workshops, and did not include any living quarters, which were located on the second floor, it becomes apparent that the inhabited spaces of the citadel could not exceed one ha. Moreover, it must be mentioned that a susi-temple,¹⁹⁸ audience and feasting halls, and the quarters of the governor also were located there.¹⁹⁹ Accordingly, the best estimate concerning the number of the permanent occupants of the citadel could not exceed 150-250 people representing the Urartian administration, temple personnel, garrison troops, and some servants. The estimates concerning the inhabitants of the dunnu Tell Sabi Abyad in north-central Syria, one of the military-administrative centres of the province of Ḫanigalbat (Mitanni) during the Middle-Assyrian period, could support our calculations. Occupying an area of 0.36ha (60 × 60m), this fortress included a ceremonial hall, cellars, workshops and dwellings, and supposedly housed up to 60 people, including women and children.²⁰⁰ Another Middle Assyrian dunnu, Tell al-Fakhar, which occupied an area of around 0.15ha, had probably around 40-45 inhabitants.²⁰¹ Taking into account these parallels, it can be suggested that the total population of Karmir Blur could reach up to 1800-2000 people at a maximum.

By comparison, while the whole territory of Nuzi housing around 1600 inhabitants including its suburbs,²⁰² was equal to the area taken by the citadel of Karmir Blur, the space occupied by the entire city at Karmir Blur exceeded Nuzi by almost ten times.

Calculating the population size of Arğištihinili-Armavir, the largest Urartian city in the Ararat Plain, on the basis of the above estimated numbers, we would come to the conclusion that it hardly exceeded 3000-4000 people. Consequently, the opinion that Arğištihinili-Armavir could have around 30,000 inhabitants²⁰³ cannot be accepted as realistic. Same could be said about the capital city of Tušpa. Even if one accepts that the inhabited sections of the 'outer town' spread beyond the fortified 'lower town', which surrounded the citadel on the Rock of Van from all sides, still the number of 50,000 people suggested for the population size of the capital city²⁰⁴ seems quite exaggerated. One can arrive to a similar conclusion with regard to the suggested 20,000 inhabitants of Karmir Blur.²⁰⁵

For comparison, one can mention that the estimated population size of Ḫattuša (181ha), the capital city of the Hittite empire, varies between 9000 and 15,000

¹⁹⁴ An area of the settlement is 0.94 ha according to Paul Zimansky (1985: 35, Tab. 2).

¹⁹⁵ Kleiss and Kroll 1978: 51.

¹⁹⁶ See in detail Zorn 1994: 31ff., Tab. 1.

¹⁹⁷ Adams 1965: 41; 1981: 69; 144; Wright 1969: 39; Weiss 1986: 95 and n. 8; Garr 1987: 39; Kühne 1990: 19; van Driel 1999-2000: 83, n. 22; Casana 2009: 30; Pedersén *et al.* 2010: 122.

¹⁹⁸ Dan 2010: 44ff., Figures 1-6.

¹⁹⁹ Hovhannisyan 1964: 35; Ghafadaryan 1984: 78-79.

²⁰⁰ Wiggermann 2000: 191.

²⁰¹ Koliński 2002: 9ff.

²⁰² Maidman 1995: 935.

²⁰³ Martirosyan 1974: 137.

²⁰⁴ Burney 1972a: 183. See also Tarhan 2011: 291.

²⁰⁵ Cf. Hovhannisyan 1996: 94.

inhabitants.²⁰⁶ According to Assyrian sources, the population of Kalḫu, the new residence-capital of the Assyrian king Aššur-našir-apli II was about 16,000-17,500 people,²⁰⁷ at the time when the city occupied an area of 360ha,²⁰⁸ 185ha of which were residential areas.²⁰⁹ Even in this case, the population density was lesser than 100 people per one ha. Counting 100 people per one ha, a population close to 15,000 inhabitants was suggested for Nineveh (around 150ha) in the times before the reign of Sennacherib,²¹⁰ which could reach up to 75,000 inhabitants after the large-scale reconstructions and expansion of the territory of the city (750ha) carried out by that ruler.²¹¹

It is suggested that the population of Dūr-Katlimmu (around 100ha) could have been 9000 people.²¹² According to Assyrian sources, Sargon II repopulated Hamath, the conquered Syrian city with 6300 Assyrians.²¹³ A similar picture could also be outlined for the contemporary Babylonian cities and towns. For example, the suggested minimal number of Babylon's population was estimated around 80,000 people occupying an area of 800ha.²¹⁴ Even Aššur, the first capital city of Assyria, covering an area of only 65ha, with its large temples and palatial complexes, could have had around 9000 inhabitants.²¹⁵ Supposedly 8000 inhabitants lived in Jerusalem (100ha) before Sennacherib's campaign to Palestine in 701 BC.²¹⁶ The large city at Kerkenes Dağ could have had 18,500-23,000 inhabitants. This number seems quite realistic for a site, which covered an area measuring around 250ha.²¹⁷

The Concept of 'City' in Urartu (in lieu of conclusion)

It is apparent that the idea of city-building in Urartu was dominated exclusively by the concept of palace/temple, which, we may suggest, was conditioned by the nature of the Urartian empire conceived as a palace-temple state and its economy based on a redistribution system. The economy of each province – irrigated agriculture, stockbreeding and handicraft industry – was controlled and directed by the 'city'. For this reason, there are no notable differences in functions between Urartian 'cities'. Hence, it is also not possible to observe features that would allow for an essential typological differentiation between Urartian 'cities'.

The central complex of the Urartian 'city' was a fortified palace-temple. It is distinguished by its monumental architecture, which contained as required components a susi-temple and a 'palatial'-type complex (including a 'ceremonial hall'). The storage facilities belonging to the state were concentrated in those 'cities.' From there the Urartian elite administered all activities on the territories under their direct control. Not surprisingly, the extant examples of exclusively bureaucratic documents were found only from those 'cities', while no traces of existence of any private archives or business interactions have been found.

Urartian cities had limited territory and population. The size of the latter was directly correlated to the functions carried out by that centre, and the 'population' itself existed to support the functioning of the 'city'.²¹⁸ For that reason, none of the Urartian urban centres are comparable from the standpoint of the size of their territory, building density and population size with the Syro-Mesopotamian urban settlements of the same period. However, Urartian town-building had preserved the 2nd mill. BC Mitannian/Middle-Assyrian traditions of urbanism and carried them into the 1st mill. BC.

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²⁰⁶ Mielke 2011: 183f.

²⁰⁷ Grayson 1991: 293 (A.O.101.30: 147-148). See also Reade 1982: 102; Wilkinson *et al.* 2005: 26.

²⁰⁸ Oates 1968: 42.

²⁰⁹ Ur 2013: 14.

²¹⁰ Stronach 1994: 99.

²¹¹ Oates 1968: 43; Stronach 1994: 100ff.

²¹² Kühne 1990: 19.

²¹³ Hawkins 2004: 160f.

²¹⁴ Pedersén *et al.* 2010: 136.

²¹⁵ Cf. also Liverani 2011: 253.

²¹⁶ Geva 2014: 141.

²¹⁷ Summers and Summers 2006: 80.

²¹⁸ See and cf. also, Biscione 2003: 183f. About the notion of 'city' in Armenian Highland and the issue of town emergence, see and cf. Areshian and Ghafadaryan 1996: 68-86; Bobokhyan 2014: 40-75; Smith 1998: 74, n. 3; 2003: 241ff.

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Achaemenids and the Southern Caucasus

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'Armenia, a great and wealthy land'
(Xenophon, *Anabasis* III 5.17)

Abstract: With the campaign of Darius I against the Scythes in the years 513/512 B.C., the Southern Caucasus region was definitely incorporated in the Achaemenid empire. According to Herodotus, this area became the 13th and 18th satrapy and remained a province until the fall of the Achaemenid empire in 330 BC. Furthermore, in the trilingual rock inscription of Bisutun under Darius I, Armenia is synonymous with Urartu. Apart from other inscriptions that mention Armenia, there is further evidence of the Achaemenid epoch. For instance, there is proof of both the re-use of former Urartian settlements on modern Armenian territory and the erection of huge palace complexes. In addition, tombs dating back to that period have been discovered above all on the territory of the modern states of Armenia and Georgia.

Keywords: Achaemenid Empire, Inscriptions, Jewellery, Palaces, Pins, Settlements, Southern Caucasus, Tombs

Introduction

In the second half of the 6th century BC the southern Caucasian region was annexed by the increasingly expanding Achaemenid Empire. This occurred in the years of 513/512 BC at the latest, when Darius I led a campaign against the Scythians. However, this region possibly got under Achaemenid control already at an earlier point, during the reign of Cyrus II. A paragraph of the Nabonidus Chronicle reports on a campaign by Cyrus II. The only fragmentarily preserved name of the land the Persian king turned against was interpreted as Lydia.¹ This was, however, questioned already by N. Cargill.² J. Oelsner suggested to read the first, still preserved, sign as an Ú and thus interpret the name as Urartu.³ Based on this reflection, R. Rollinger intended to date the definite decline of Urartu back to the 6th century BC.⁴ Thus, a small residual state of Urartu would have persisted beyond the 7th century BC at least on today's Armenian territory and would have been defeated not before Cyrus's II desire to expand.⁵

The Satrapy of Armenia

According to Herodotus (III 93), the original region of Urartu became the 13th and 18th satrapy and persisted

as a province until the fall of the Achaemenid Empire in 330 BC. For Armenia, several satraps of the Achaemenid Empire are attested. Tanaoxares, who was the first to be mentioned by name in the *Cyropaedia* of Xenophon (VIII 7.11), is said to have received the satrapy of Armenia as a compensation for the throne. H. Klinkott, by contrast, challenges this fact as an early proof for the existence of Armenia as a satrapy.⁶ Hydarnesis one of the seven conspirators who murdered the false Smerdis (Gaumata/Bardiya), which entailed the accession to the throne of Darius I. As a reward for his loyalty he received the satrapy of Armenia. From this time onwards, his family provided the satrap for Armenia.⁷ Hydarnes was succeeded by Tiribazos.⁸ According to the *Anabasis* of Xenophon (IV 4), Tiribazos ruled Western Armenia, while Orontes I is said to have governed the satrapy of Eastern Armenia.⁹ The latter took part in the so-called revolt of the satraps and is referred to in this connection as the satrap of Mysia.¹⁰ As the successor of Tiribazos, Darius Kodommanos - the later Darius III - was entrusted with the satrapy of Armenia. Orontes II is listed as the last satrap under Achaemenid hegemony.

Whether Alexander the Great ever crossed historic Armenia during his campaign and whether this area subsequently became part of Alexander's empire

¹ Smith 1924: 109.

² Cargill 1977: 101.

³ Oelsner 1999-2000: 378-379. According to Jacobs 2000: 93 however, the area of Urartu was definitely under Persian rule at 547 BC, for at that time, Persians and Lydians already confronted each other further in the West at the Halys.

⁴ Rollinger 2005: 14; 2008: 59-60.

⁵ The question of the decline of the Urartian Empire Hellwag 2012: 227-241 dealt with in detail. For the discussion about the name of the land in the Nabonidus Chronicle, also see Stronach 2007: 163-173; 2008: 151-152. Also Roaf 2012: 208 considers Armenia to be part of the Persian Empire at the time of Darius' I takeover in 521 BC. Zawadski 2010: 147 rejects the reading of the sign as an Ú and he suggests that 'the reading [Lu¹-u[d²-di] seems more probable than [Ú¹-[raš-tú]'.
⁶ Klinkott 2005: 451.

⁶ Klinkott 2005: 451.

⁷ Klinkott 2005: 451. Schmitt 1987: 418. According to Strabo XI 14.15, Hydarnes is considered to be the founder of the Armenian Dynasty of the Orontides (Forbiger 2005: 768).

⁸ Klinkott 2005: 451.

⁹ Klinkott 2005: 453 considers Xenophon's subdivision into Western and Eastern Armenia to be a mere geographical name without any administrative indication. Schmitt 1987: 418 differentiates between Western Armenia (Tiribazos) and Armenia (Orontes).

¹⁰ Klinkott 2005: 452 underlines that this source not only is the only reference to Mysia as a satrapy, but at the same time also the only proof for Orontes I in the function of a satrap.

cannot be definitely confirmed.¹¹ Arrian (III 16.5) is considered to be a reliable source, according to which Alexander sent his loyal follower Mithrenes from Babylon to Armenia as a satrap in 331 BC.¹² There are, however, speculations about Mithrenes never having reached his destination, since he possibly lost his life on his way to Armenia. Until Alexander's death in 323 BC, there are no reports on a possible satrap of Armenia. In the 'Partition of Babylon' after Alexander's death Neoptolemos was named satrap of Armenia.¹³ For the year 317 BC an Orontes is listed again, who in all probability is identical with the satrap Orontes II under Darius III.¹⁴ The satrapy of Armenia, however, seems to have been very small at this point already and did not even extend to Lake Van.¹⁵

In how far the entire region of the Southern Caucasus was under direct Achaemenid control is also subject of controversial discussions. F. Knauß¹⁶ and also I. Gagošidze¹⁷ consider the whole area of today's Georgian Republic as part of the Achaemenid Empire. O. Lordkipanidze¹⁸, by contrast, regards the Caucasian kingdom of Iberia as independent and limits Achaemenid control to the region of Kachetia.

B. Jacobs¹⁹ regards the Colchis as part of the Achaemenid Empire, while A. Bill²⁰ assigns it a status independent of tributes outside the system of satrapies. According to Arrian (*Anabasis* III 8.4 and III 11.4), the region where the Kingdom of Albania came into being in the 4th century BC, provided troops under the command of Atropates, the satrap of Media,²¹ in the battle of Gaugamela.

However, scientists unanimously agree that Herodotus' (III 97) statement about the mountain range of the Greater Caucasus forming the northern border of the

Achaemenid Empire is reliable.²² Finds from further north can be regarded as influence of the Achaemenid culture.²³ Also here we can refer to a paragraph of Herodotus (IV 124), who describes that in the course of their campaign against the Scythians the Achaemenids tried to bring the area north of the Greater Caucasus under their control by building fortresses.²⁴

Armenia in Achaemenid Sources

The Rock Relief of Bisutun

Already under Darius I the term of Armenia as synonymous with Urartu can be found in the trilingual rock inscription of Bisutun (Figure 1).²⁵ The Babylonian version uses both the name of the land for Urartu (^{KUR}ú-ra-áš-tu) and the name for its inhabitants, the Urartians (^{LU}ú-ra-áš).²⁶ The Old Persian version uses the term Armenia (Old Persian *Armina*) and *Arminiya* for its inhabitants - and also in the Elamite version the phonetical *Har-mi-nu-ya(-ir)* is used.²⁷ The equation Uraštu = Armina in the rock inscription of Bisutun is for M. Salvini the proof that at this epoch ethnic Armenians lived in the former region of Urartu.²⁸

The inscription of Bisutun reports on the events around the takeover by Darius I and the abolition of numerous revolts against him in various regions of the empire. Also the Armenians rebelled (DB §§ 26-28).²⁹ Darius I sent a loyal Armenian named Dādarši with an army against the rebels. Although he was able to defeat the Armenians three times overall, the officer Vaumisa needed two more battles to get the situation under control.³⁰ However, not a single Armenian leader is listed by name. T. C. Young mentions four lists in the inscription of Bisutun:

1. the inheritance list (DB § 6)
2. the list of rebel peoples (DB § 21)
3. the campaign list (DB §§ 22-50)
4. the illustrated list (DB b-k)

¹¹ Berve 1926: I.262, for instance, rejects this idea: 'Armenien kann nur nominell, nicht faktisch als Satrapie gelten' (Armenia can only nominally be regarded as a satrapy, not factually). Further Berve 1926 I.290: 'Zwar 331 prinzipiell von Al. [Alexander] zur Satrapie gemacht (...), jedoch faktisch bis über Als Tod hinaus unabhängig unter seinem einstigen Satrapen Orontes' (Being principally made satrapy in 331 by Al. [Alexander] (...), but factually remaining independent beyond Al.'s death under his former satrap Orontes). Sherwin-White and Kuhrt 1993: 191, by contrast, write: 'Although there are many uncertainties about Armenia under Alexander and the Seleucids, Strabo's description of the area (XI 14.1-16) does indicate that Alexander ruled it after the Achaemenids'.

¹² Here cf Hammond 1996: 130.

¹³ Anson 1990: 125-128. References to Neoptolemus' function of a satrap are unsatisfactory. Hammond 1996: 132 is very critical towards this idea. Klinkott 2005: 451-453 does not mention him at all.

¹⁴ Also Berve 1926 II.295.

¹⁵ Hammond 1996: 133.

¹⁶ Knauß 2001: 125-126 with note 14.

¹⁷ Gagošidze 1996: 125-126.

¹⁸ Lordkipanidze 2000: 9-11.

¹⁹ Jacobs 1994: 184; 2006: '(...) the Colchians were settling on imperial territory; and, since their estates, as Herodotus and others relate, were situated at the Phasis (...)' The Phasis is today's river Rioni, which originates in the Greater Caucasus, crosses the entire Colchian plain and flows into the Black Sea.

²⁰ Bill 2010: 16-17.

²¹ Chaumont 1987: 806.

²² Jacobs 2000: 99; Knauß et al. 2013: 1.

²³ In this context see the comprehensive work of Treister and Yablonsky (Ed.) 2013.

²⁴ Jacobs 2000: 100. It is reported that a total of eight fortresses had been built along the river Oaros (today's Sal) and that those were destroyed again already at the epoch of Herodotus (Horneffer 1971: 297).

²⁵ Schmitt 1987: 417.

²⁶ Schmitt 1987: 417.

²⁷ Schmitt 1987: 417. Compare here Bae 2001: 82-83.

²⁸ Salvini 2012: 463. Nevertheless, the derivation of the name Armina has not been satisfactorily clarified to date. According to Schmitt 2014: 137 this term has not become common until the Achaemenid epoch and thus might be of Iranian origin in the sense of '(Gegend) mit verlassenen Siedlungsplätzen' ((area) with abandoned settlements). Thus also already Schmitt 2008: 505-506.

²⁹ Schmitt 2009: 54-57.

³⁰ Briant 2002: 117; Potts 2006-07: 134. The Babylonian version of the Bisutun inscription is the only one to list the victims of the battle. Thus, the total number of victims of the five campaigns is at least 5097 killed and 2203 captured Armenians (Dandameav 1989: 122).



Figure 1. The Rock Relief of Bisutun (Koch 1992, Plate 2).

The Armenians are referred to in the ‘campaign list’, which is an extended version of the ‘list of rebel peoples,’ but not in the latter list itself. For this reason T. C. Young suggested that at this time Armenia formed part of Media and thus did not have its own king.³¹ This thesis is supported by the relief of Bisutun, which depicts the subjugation of the rebels, since no Armenian is represented.³² It seems, however, possible to make a correlation between one of the eight ‘lying kings,’ Arahū, and Armenia.³³ In the Old Persian version he is called ‘an Armenian, son of Haldita’ (DB § 49)³⁴, who rose in Babylonia as Nebukadnezar, son of Nabonid.³⁵

³¹ Young 2004: 281 note 22.

³² Potts 2006-07: 134; Roaf 2012: 209.

³³ The derivation of this name, however, does not really seem to be correlated with Armenia. Schmitt 1980: 9; 2014: 134 presumes that the name is of Urtian origin.

³⁴ Schmitt 2009: 73.

³⁵ For Arahū, who under the name of Nebukadnezar (IV) rose to the King of Babylon, see Streck 1998-2001: 206. Under the command of Intaphernes the rebellion was abolished and Arahū and his followers were staked in Babylon (DB § 50). See Schmitt 2009: 74 and Schwinghammer 2011: 673. Beaulieu 2014: 18 considers Arahū as an Urtian, since his father’s name Haldita was definitely Urtian (thus also Schmitt 2014: 187). His denomination as an Armenian was only an indicator for his geographical origin. Roaf 2012: 210 is sceptical towards correlating the name Haldita with the name of the supreme god of the Urtians, Haldi, since this patronym is also common in the Elamite version.

This is also true for the Elamite version, while in the Babylonian version he is referred to as an Urtian.³⁶

The Darius Statue from Susa

The base of the famous Darius statue, which was discovered in 1972 at the doorway building of the palace of Susa, exhibits a total of 24 persons kneeling on a fortress oval with hieroglyphical inscriptions (Figure 2). The respective inscription names the lands the persons stem from.³⁷ The 14th person represents an Armenian.³⁸ Armenia is thus mentioned after Babylonia (13th position) and before Lydia (15th position) and Cappadocia (16th position). As on the representations on the Apadana in Persepolis, Armenians and Cappadocians are wearing Median clothes, which proves that these peoples stem from adjacent regions within the Achaemenid Empire. The Median traditional clothes are characterized by a bonnet with ear or cheek

³⁶ Bae 2001: 184-185.

³⁷ Here also compare the preserved list of nations on the stela from Tall al-Mashkuta; there, Armenia is also mentioned in 14th position (Posener 1936: 54). It is very likely that the Armenians were also listed on the so-called Chalouf stela from Kabret, but not all names of the nations have been preserved (for a reconstruction see Posener 1936: 70 and Cameron 1943: 308).

³⁸ Roaf 1974: 124-125.

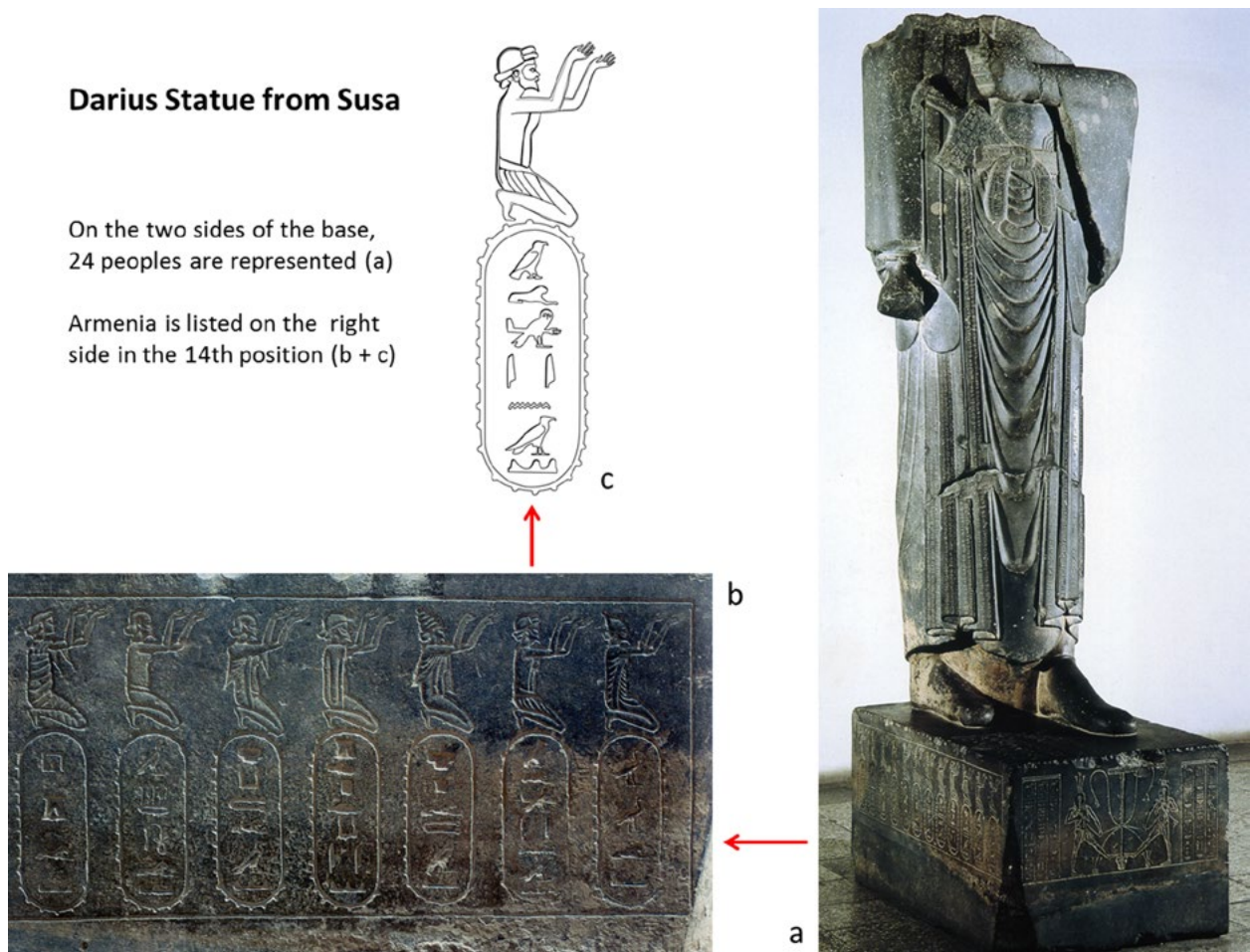


Figure 2. The Darius Statue from Susa (Yoyotte 2010, Figure 262, 290, 294; modified by M. Herles and M. Lerchl).

flaps and a short tunic. In contrast to the Medes and the Cappadocians, the Armenians do not wear coats (*kandys*). In the fortress oval below the name of the land is written in hieroglyphics: 'a-rw-m-y-n-a' (Armenia).³⁹

The Reliefs in Persepolis

On the reliefs at the eastern and northern side of the Apadana, traditionally the third delegation is regarded as the one from Armenia (Figure 3).⁴⁰ They are wearing the traditional horseman clothes of the Medes and a bonnet with tied-up ear flaps. It depicts three persons being led to a Persian and offering a large two-handled metal vessel and a bridled horse as presents. While on the tombs of the Achaemenid kings in Naqš-e Rostam (see below) the peoples are shown as platform bearers,



Figure 3. Persepolis: the third delegation (Armenians) on the reliefs of the Apadana (Walser 1966, Plate 10)

in Persepolis they are represented as throne bearers on the reliefs at the Council hall and at the Hall of 100 columns. The two reliefs have a common feature: 'the 28 carriers on the Council hall exactly correspond to the two groups of 14 Figures on the Hall of 100 Columns'.⁴¹ E. Schmidt regards the first sixteen delegations of the

³⁹ Yoyotte 1974: 183; 2010: 293. Also see Roaf 2012: 208.

⁴⁰ Walser 1966: 74-75; Schmidt 1953: 85. Hachmann 1995: 206, by contrast, would like to identify the Parthians as third delegation. To him, the Armenians represent the 16th delegation, which traditionally is regarded as Sagartian. Furthermore, Hachmann 1995: 210-211 suggests to interpret the 21st delegation as Colchian. He refers to Herodotus (III. 97), who reports that the Colchians voluntarily imposed taxes on themselves.

⁴¹ Walser 1966: 57.

council hall and of the Apadana as identical; thus the Armenians would be depicted in third position.⁴² The same would apply to the representations of the Hall of 100 Columns.

The Tomb of Darius I at Naqš-i Rostam

About 6km north of the residence town of Persepolis, at Naqš-i Rostam, there are the rock cut tombs of Darius I and his three successors. The corresponding relief shows the emperor standing on a platform, which in turn is carried by the 30 peoples of his empire. The Armenian is depicted in 20th position, wearing Median clothes. On the tomb of Darius I the trilingual inscription denominates him as an Armenian in both the Old Persian (DNe)⁴³ and the Elamite version, while in the Babylonian version he is considered as an Urartian.⁴⁴

The Armenian is wearing a bonnet with tied-up flaps and a short tunic. This clothing is almost identical with that of the Cappadocians and Medes, so that E. Schmidt called these peoples 'West Median' in his group IIa.⁴⁵

Other Lists of Nations in Achaemenid Inscriptions

The foundation tablet DHa⁴⁶ from Hamadan is a trilingual document and has been preserved as a duplicate on a golden and silver plate. Its equivalent with identical text can be found in the foundation tablet DPh⁴⁷ from Persepolis. Darius I reports here on the geographical expansion of his empire. For this reason, only the most remote nations are listed. Armenia is not mentioned.

Inscription on the southern Terrace Wall in Persepolis

The southern terrace wall in Persepolis exhibits the inscriptions DPe and DPd, as well as the Elamite inscription DPf and the Akkadian inscription DPg. DPe can probably be dated to the times of the Bisutun inscription. Darius enumerates the lands he possesses: Armenia is mentioned in 7th position.⁴⁸

Inscription from Susa

At the beginning of the text, the inscription DSe from the palace of Darius I in Susa lists in well-known manner the lands annexed. Armenia is mentioned in 20th position directly after Egypt and before Cappadocia.⁴⁹

The 'Daiva' Inscription by Xerxes I

Another list of peoples can be found in the so-called 'Daiva' inscription (XPh) by Xerxes I. The inscription starts with a list of nations paying tribute to the Achaemenid king and tells that one of these lands revered the *Daivas*. The king ordered to destroy the sanctuary. Armenia is mentioned here between Arachosia and the Drangiana in 4th position.⁵⁰ Also the Elamite version mentions Armenia (*Har-mi-nu*).⁵¹ In R. Schmitt's opinion this list of peoples has a very peculiar ('*sehr auffällige*') and strange ('*merkwürdige*') order.⁵²

Re-Use of former Urartian Settlements on present Armenian Territory

Several Urartian towns continued to be used in the Achaemenid and Hellenistic epochs. The only known Achaemenid rock inscription on former Urartian territory was made in the rock of Van (XVa) by order of Xerxes I. The Achaemenid rulers will have been well conscious of the importance of the former Urartian capital of Tušpa. Xerxes I, for instance, reports that already his father planned to have an inscription made there; however, this had never been executed so that he completed it.⁵³ It is conjecturable that Darius I initiated a busy building program at the rock of Van.⁵⁴

For some important places there is no evidence of re-use in the Achaemenid period. Artashat was founded on the remains of an Urartian fortress (on hill II) by Artaxias I (c. 189-160 BC) in 180 BC. Excavators date the relatively well preserved Urartian fortress wall to the epoch of Argišti I; on account of its good condition it still served as part of the wall system in the Hellenistic period.⁵⁵

Since it is generally assumed that the former Urartian administrative and economic centres continued to be in use in the Achaemenid epoch, it is often referred to Artashat in this context.⁵⁶

⁴² Schmidt 1953: 118. Hachmann 1995: 207, by contrast, suspects the 16th throne bearer to be the Armenian. Herzfeld suggested that the satrapy of Armenia was divided during the reign of Xerxes. He calls Figure 3 Armina I, Figure 16 Armina II (Herzfeld 1968: 360-361).

⁴³ Schmitt 2009: 113. The Old Persian addendum DNe, however, mentions the name of the land *Armina* instead of the ethnonym, which seems to have been done for lack of space.

⁴⁴ This also applies to the addenda of the throne bearer of tomb V (A³Pb) in Persepolis. Here, the ethnonym *Arminiya*- (Schmitt 2009: 199) is given correctly. Also see Schmidt 1970: 109.

⁴⁵ Schmidt 1970: 110. Here also see Walser 1966: 38-39 and Roaf 2012: 210.

⁴⁶ Schmitt 2009: 98-99.

⁴⁷ Schmitt 2009: 119-120.

⁴⁸ Schmitt 2009: 118.

⁴⁹ Schmitt 2009: 123-127; Walser 1966: 36-38.

⁵⁰ Schmitt 2009: 166. Schmidt 1970: 110 lists Armenia in fifth position, since he mentions the province of Persia in first position.

⁵¹ Cameron 1959: 273.

⁵² Schmitt 1980: 7.

⁵³ Schmitt 2009: 180-182.

⁵⁴ Summers 1993: 85.

⁵⁵ Kanecyan 2000: 104-105.

⁵⁶ Kanecyan 2000: 103.

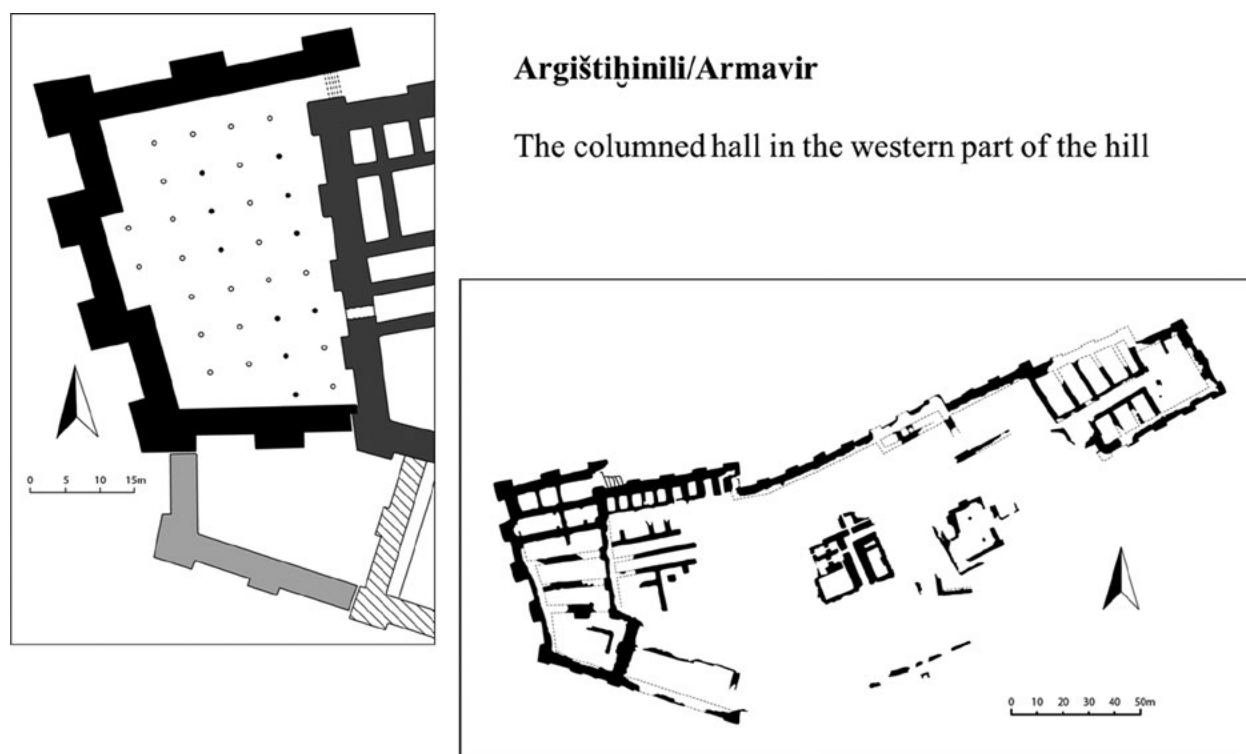


Figure 4. Argištihinili/Armavir: the columned hall (Kafadarian 1984: 51, Figure 14 and 54, Figure 16b, modified by M. Lerchl).

A comparable situation is to be found in Garni. Under the rule of the Orontides and Artaxides a huge palace and temple complex was built there. A fragmentarily preserved Urartian inscription with a military campaign report by Argišti I (CTU A 8-12) was discovered *in situ* and mentions the conquest of the town of Giarniane and the deportation of men and women.⁵⁷

Aramus

The small Urartian fortress of Aramus continued to be in use in the Achaemenid epoch. Period III,⁵⁸ which is assigned to the late Urartian epoch under Rusa II, was followed by a transitional unfortified phase in the 6th century BC.⁵⁹ Period II dates back to the Achaemenid epoch and seems to end in the 4th century BC.⁶⁰

Corresponding evidence was found in the area of the eastern castle.⁶¹

Argištihinili (Davti-Blur and Armavir)

Similar theories of re-use also exist for Argištihinili. On the western hill of Davti-Blur the ruins of a columned hall were uncovered, the utilization phase of which cannot be definitely determined. According to A. Kanetsyan, it was erected in the Urartian epoch and further used in the Achaemenid period.⁶² In the western part of the eastern hill of Armavir a room was discovered between two fortification walls, which had been constructed in several phases. In its last phase of modification the columned hall was erected (Figure 4). On the basis of the known size of the room and the ten bases found, A. Kanetsyan reconstructs a hall with a total of 32 column bases, which was probably built in the Late Urartian period.⁶³ In F. Ter-Martirosov's opinion, by contrast, this column architecture originates from the Achaemenid period.⁶⁴ This thesis is, however, largely rejected.⁶⁵ The

⁵⁷ Diakonoff and Kashkai 1981: 36. Salvini 2008: 351 rejects the reading ^{KUR}Gī-lar-ni-a-ne¹ by Arakeljan and Arutjunjan 1966: 295 and instead suggests ^{URU}Hil-x-ri-ni-a-ni.

⁵⁸ This periodisation is according to Kuntner and Heinsch 2012: 403-410. It categorises five periods overall: period IV and III are assigned to the Urartian epoch and period II represents the Achaemenid settlement phase. Kuntner and Heinsch 2010: 347 Figure 3, by contrast, only distinguish three periods: period III is documented by a fortress wall, period II represents the Late Urartian period and period I is - subdivided into five phases - dated from the Achaemenid to Medieval times. Thus also Heinsch *et al.* 2012: 137.

⁵⁹ Kuntner and Heinsch 2010: 339.

⁶⁰ Kuntner and Heinsch 2012: 410.

⁶¹ Kuntner and Heinsch 2010: 339.

⁶² Kanetsyan 2001: 148. Furthermore, on one of the stone bases, an inscription by Argišti I (CTU A 8-39) was discovered, which according to Dan 2015: 26 was, however, used secondarily.

⁶³ Kanetsyan 2000: 108.

⁶⁴ Ter-Martirosov 2001: 156. Against this opinion and in favour of dating it to the Late Urartian Period Stronach 2012: 317.

⁶⁵ Here also see Khatchadourian 2008: 400 note 243. Already Knauß

excavator G. Tiratsyan recognizes no definite proof of Achaemenid settlement remains in Armavir.⁶⁶

Erebuni

Above all the discovery of a hoard in Erebuni was an impressive evidence of a continued use of this settlement in the Achaemenid epoch.⁶⁷ On account of the architectural remains, scientists believed already at an early point that one of the administrative centres of the satrap of Armenia was located in that town.⁶⁸ The columned hall found there served as a proof of this thesis and was directly compared with the well-known Achaemenid columned halls. The date of this hall, however, has still not satisfactorily been determined. K. Hovhannisian recognized an Apadana in the columned hall and compared Erebuni to Susa.⁶⁹

F. Ter-Martirosov⁷⁰ also considered it to originate from the Achaemenid period, while A. Kanetsyan⁷¹ was in favour of the Late Urartian period. In more recent times, D. Stronach⁷² followed the latter thesis, while S. Deschamps⁷³ suggested to assign the possible construction of the columned hall to the elusive period between the decline of the Urartian empire and the beginning of Achaemenid hegemony.

Horom

In Horom a so-called Post Urartian level could be defined. Furthermore, a seal impression was found closest corresponding to a specimen from Pasargadae.⁷⁴ However, this seal, is a chance find and constitutes the only record of an Achaemenid period in Horom.

Oshakan

The fortress at Oshakan was left abandoned after Urartu's demise and its ruin only served as a material supply. To our present knowledge, the settlement at the hillside was not fortified. On the basis of the finds and

the architectural features of some individual rooms, the excavators dated it to the period from 7th-4th century BC.⁷⁵ The settlement comprised a huge building complex consisting of two connected room units, which the excavators regarded as a palace (Figure 5). If this dating is correct, the settlement would have been inhabited during the entire period of hegemony of the Achaemenid Empire over the regions of the Southern Caucasus. In the southern part of the complex there are two rooms (XXV and XXVII), which may be interpreted as columned halls on account of the column base fragments discovered. Neither the column bases from red tuff nor the architectural construction of the rooms allow an exact dating, but just because of its architectural features the two columned halls were dated to the Achaemenid period.⁷⁶

The excavators separated the pottery discovered in the entire building complex into four subsequent groups. Groups 1 and 2 were dated to the 7th-5th century BC, group 3 to the 6th/5th-4th century BC, and group 4 to the Hellenistic epoch.⁷⁷ The whole pottery was, however, discovered in mixed layers.

During the uncovering of a large-stone wall on the western slope of the small hill of Pokr Blur near Oshakan in 2014, a small black stone sherd (possibly from serpentinite) came to light, which used to form part of a flat, convex stone bowl (Figure 6). Fragments of a comparable stone vessel were found in Tsaghkahovit in 2006, on the floor of room G (Figure 7).⁷⁸ The vessel can be reconstructed to a flat bowl with a stepped bottom. Both the sherd from Pokr Blur and the specimen from Tsaghkahovit have their direct counterparts in Persepolis (Figure 8b-e). There, several stone bowls of very different forms were discovered in the so-called treasure house.⁷⁹ Another flat stone bowl (ANE 1880-6-17), also made from serpentinite (Figure 8a), was bought in Iraq and can today be seen in the British Museum.⁸⁰ Furthermore, there was a jasper bowl from Ikiştepe (Figure 9).⁸¹

Achaemenid Palace Complexes in the Southern Caucasus

At several find spots spread all over the Southern Caucasus, architectural remains were discovered

2005: 210 underlined that the pottery indeed exhibited Achaemenid shapes, but could as well be Hellenistic.

⁶⁶ Tiratsyan 1988: 11. An uncovered clay tablet with Elamite text is assigned to the 6th-5th century BC, which makes it very likely that Armavir was inhabited at that epoch.

⁶⁷ In detail here see Treister 2015: 23-119 with comprehensive literature.

⁶⁸ Tiratsyan 2003: 47. Here also see Hovhannisian (Oganesjan) 1960: 295. Apart from Erebuni, the former Urartian capital of Tuşpa is also believed to have been a centre of the satrapy of Armenia (Dan 2015: 11). Here, Xerxes I had the rock inscription (XVa) made, the up to present only known Old Persian rock inscription outside Persia. It adumbrates the importance of the site within the Achaemenid Empire.

⁶⁹ Hovhannisian (Oganesjan) 1960: 296.

⁷⁰ Ter-Martirosov 2001: 157-158.

⁷¹ Kanetsyan 2001: 147.

⁷² Stronach *et al.* 2010: 127-128; Stronach 2012: 317.

⁷³ Deschamps *et al.* 2011: 131.

⁷⁴ Kohl and Kroll 1999: 258 Figure 7. For the seal impression from Pasargadae see Stronach 1978: 178-180 with Plate 162a and b.

⁷⁵ Esayan and Kalantaryan 1988: 28.

⁷⁶ Ter-Martirosov 2001: 155. In room no. XXVII, however, also Urartian pottery was found (Esayan and Kalantaryan 1988: 29). Akopjan 2000: 24 argues similarly with respect to the uncovered columned hall in Ochmik. There is, however, no record of settlement in the Achaemenid era (here also see Knauß 2005: 210).

⁷⁷ Esayan and Kalantaryan 1988: 32.

⁷⁸ Khatchadourian 2014: 149.

⁷⁹ Schmidt 1957 Plate 57-62.

⁸⁰ Searight *et al.* 2008: 61 mention Northern Iraq as a possible provenance.

⁸¹ Özgen and Öztürk 1996: 130 Nr. 85. Here also see Khatchadourian 2008: 211 note 142.

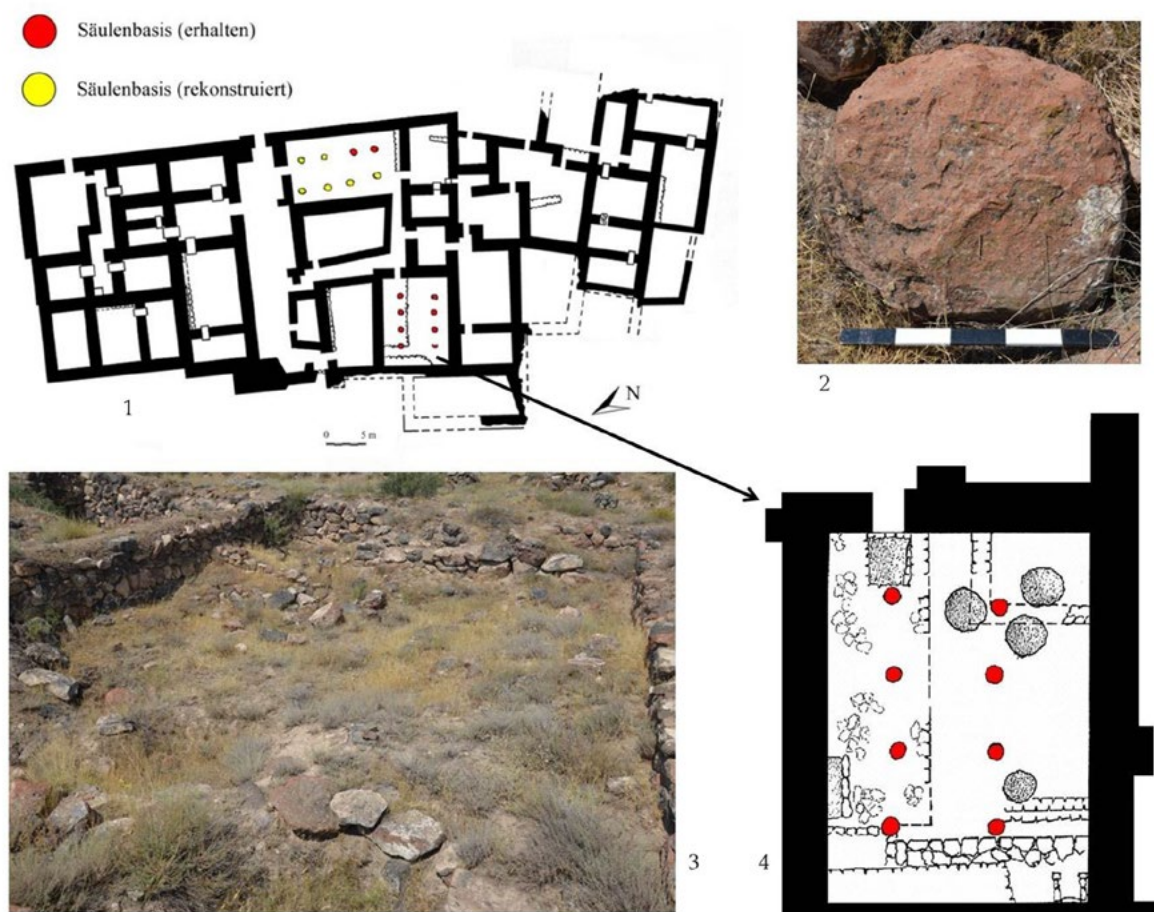


Figure 5. Oshakan: the settlement (1) (Esayan and Kalantaryan 1988, Plate XI, modified by M. Herles); photograph of a base made by tuff (2) (M. Herles 2014); photograph of room XXVII (M. Herles 2014); drawing of room XXVII (Ter-Martirosov 2001, Figure 1, modified by M. Herles)).

that substantiate Persian presence in this area. Both in Armenia and Georgia and Azerbaijan huge complexes of buildings were uncovered which their excavators referred to as palaces and which give an idea of administrative centres. Corresponding buildings impressively prove Achaemenid presence. Control was exercised either by Persian officials themselves or by installed local rulers.⁸²

According to F. Knauß's idea, all subsequently listed complexes of palaces formed a network of administrative headquarters that controlled the payment of tributes to the empire.⁸³ He considers it as realistic that a Persian official resided on these premises. Xenophon (IV 5.9-10) called these officials 'Κώμαρχος'.⁸⁴

Beniamin (Armenia)

In the province of Shirak (Armenia), a palace complex was excavated about 10km west of the town of Gyumri

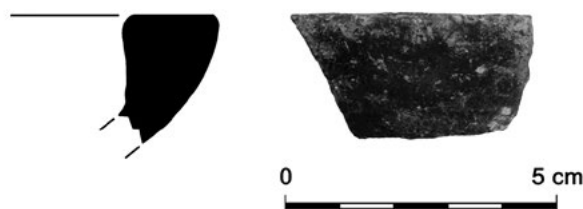


Figure 6. Stone sherd from the hill Pokr Blur (drawing: M. Wallner and M. Lerchl - photograph: M. Herles).

in Beniamin. It was located on a hill and thus allowed extensive control over the Shirak plain. The palace (Beniamin II) consists of four large halls flanked by smaller rooms at three sides.⁸⁵ Only at the northern side there were no other rooms. There, a typically Achaemenid bell-shaped column base made of black tuff was found in hall B.⁸⁶ The building complex is

⁸² Knauß 2000: 128; Knauß *et al.* 2013: 2.

⁸³ Knauß 2005: 205.

⁸⁴ Knauß 2006: 103.

⁸⁵ Ter-Martirosov *et al.* 2012: 197; Castelluccia 2015: 315.

⁸⁶ Zardarian and Akopjan 1994: 185; Knauß 2005: 209-210.



Figure 7. Fragment of a stone bowl from Tsaghkhahovit (Khatchadourian 2014: 151, Figure 12).

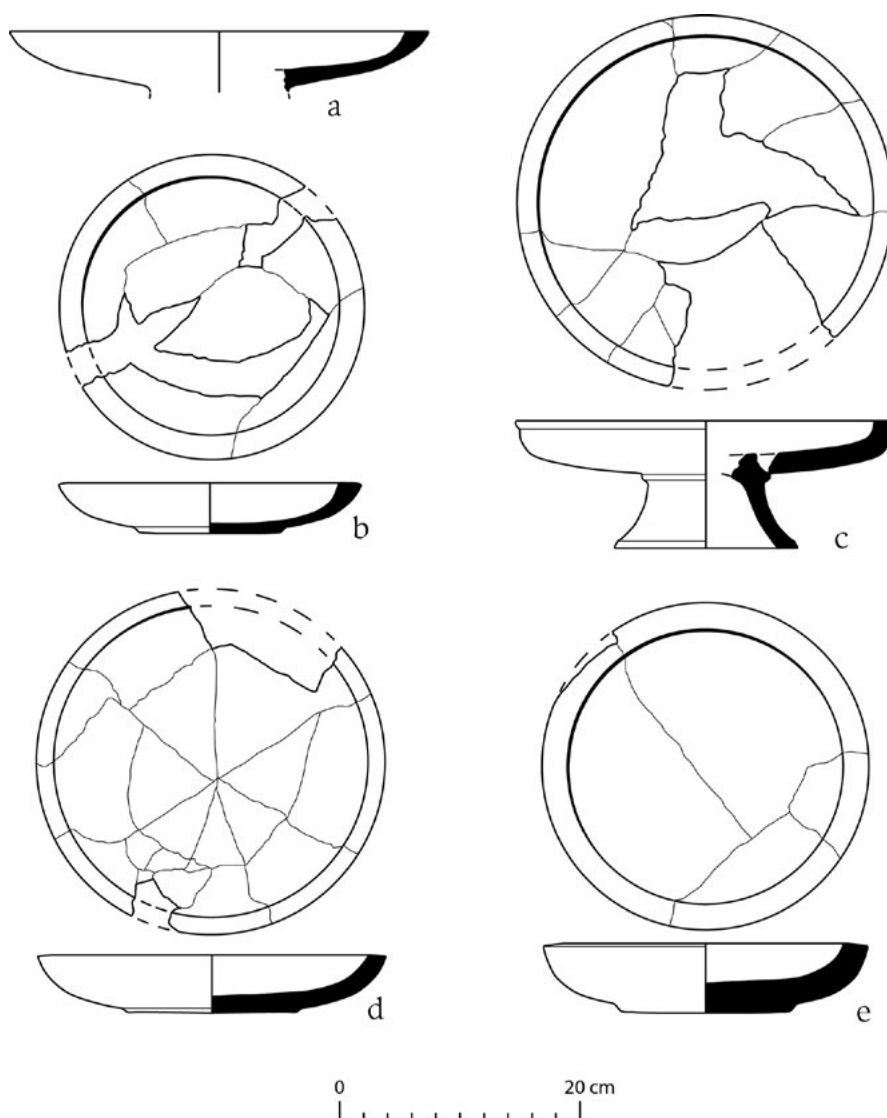


Figure 8. Stone bowl (a) from the British Museum (Searight *et al.* 2008, Figure 33, Nr. 443); stone bowls (b-e) from Persepolis (Schmidt 1957, Plate 24, 1-3 (2,4-5), Plate 58,8 (3)).



Figure 9. Stone bowl from İkiztepe (Özgen and Öztürk 1996, 130, no. 85).

overlain by a more recent phase of settlement under Artaxias I (approx. 189-160 BC).⁸⁷ A little more to its west the corresponding settlement (Beniamin III) with halls and simple column bases used to be located at the foot of the hill. Within the settlement, for which several phases of reconstruction are documented, there was found evidence of a.o. a blacksmith's workshop.⁸⁸

Karaçamirli (Azerbaijan)

In the years from 2006-2011, an Achaemenid palace complex was excavated in Karaçamirli. The residence comprised at least four monumental buildings, two of which were almost completely uncovered.⁸⁹ One of them is a Propylon on the Ideal Tepe, which has its identical counterpart in the Council hall in Persepolis.⁹⁰ Furthermore, a palace was excavated on Gurban Tepe, the floor plan of which resembles that of the palace of Xerxes I in Persepolis.⁹¹ The brick dimensions of both buildings comply with Achaemenid standard (33cm × 33cm × 12cm).⁹²

By means of magnetic prospection a structure in the ground was recognized that suggests an enclosing wall. There is evidence of more Persian remains on Rizvan Tepe and on the plot of Dara Yatax.⁹³ The latest

examinations north of Gurban Tepe will extend insight into settlements there during the Achaemenid era.⁹⁴

Sari Tepe (Azerbaijan)

Already at the end of the 1950s, the western part of a building complex, which also contained two bell-shaped column bases, was excavated in Sari Tepe, a hill at the border of the modern town of Kazakh.⁹⁵

Gumbati (Georgia)

In Gumbati in Kachetia a palace was excavated in the years from 1994-1996, the floor plan of which closest corresponds to that in Sari Tepe.⁹⁶ The building is made from clay bricks; only the southern part of it has been unearthed. Several phases of settlement were identified in Gumbati: phase C is the period of the palace site, furthermore, there are two subsequent phases of settlement (phase B1 and B2), as well as more recent graves (phase A). The dating of phase C can only be determined with the help of the bell-shaped bases of stone, which are dated to the Achaemenid period between Darius I (521-486 BC) and Artaxerxes II (404-359 BC).⁹⁷ Since in the region of Eastern Georgia there are no analogous architectonical ancestors, the excavators believe that the site was built either by foreign, Persian, craftsmen or by persons who were trained correspondingly in Persia.⁹⁸

Tombs

Numerous pieces of jewellery and metal vessels prove the influence of Achaemenid culture in the Southern Caucasus. These luxury goods might well have got to the Caucasus region in the form of presents.⁹⁹ But there also exist less luxuriously equipped graves, which on account of their grave goods may be dated to the Achaemenid period. In many cases, however, the graves seem to stem from the same period, since the grave goods cannot be identified as Achaemenid.¹⁰⁰ In

⁹⁴ Babaev *et al.* in print.

⁹⁵ Narimanov 1960: 162-164.

⁹⁶ Knauß 2000: 119-130; 2005: 205.

⁹⁷ Furtwängler 1995: 193; Ludwig 2010: 23-24.

⁹⁸ Knauß 2005: 205. Also Gagoshidze 1996: 130 recognises a clear change in Georgian architecture, which in his opinion is due to Iranian influence.

⁹⁹ Knauß *et al.* 2013: 2 remark that a large part of the phiales found in the Colchis were manufactured in all probability in Anatolia.

¹⁰⁰ This seems to apply to e.g. some graves from Garni, which the excavators date to the 6th-4th century BC. However, neither their type (stone box and pithos burials) nor their inventory allow a clear dating (Khachatryan 1976: 19-20. Here also see Castelluccia 2015: 339-340). On the burial ground of Astkhi-Blur some graves also date to the Achaemenid epoch (Esayan 1976: 131-133. Here also see Castelluccia 2015: 358 and Dan 2015: 17 note 44.). On the burial ground of Kavitschevi, a total of 30 burial pits also date to the 6th-4th century BC. It is situated north-east to the hill of Zikhia-Gora, which is located approx. 8-9 km east of Samadlo (Bill 2003: 185; here also see Khatchadourian 2008: 214).

⁸⁷ Zardarian and Akopjan 1994: 185; Ter-Martirosov *et al.* 2012: 198.

⁸⁸ Ter-Martirosov *et al.* 2012: 199-200.

⁸⁹ Knauß *et al.* 2013: 7.

⁹⁰ Knauß *et al.* 2013: 9.

⁹¹ Knauß *et al.* 2013: 17.

⁹² Knauß *et al.* 2013: 14.

⁹³ Knauß *et al.* 2013: 19-22.

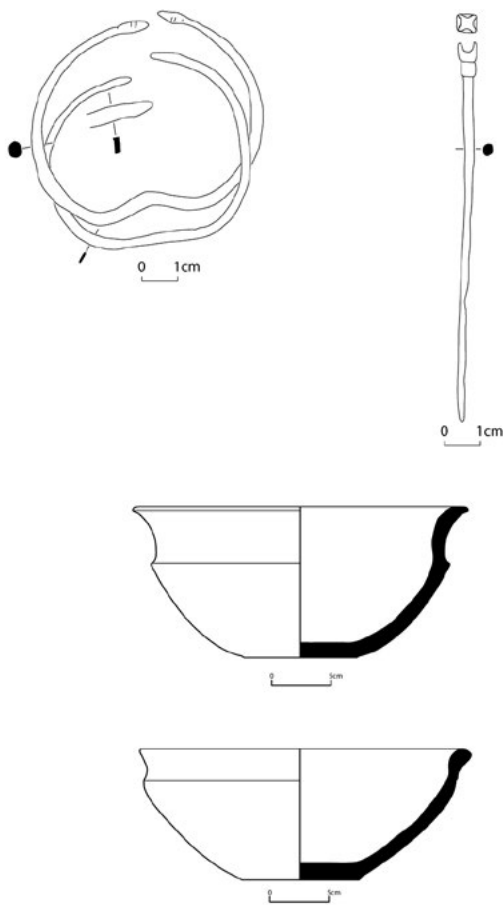


Figure 10. Karchaghbyur: Grave goods from grave 22 (Yengibaryan 2002, Plate II, 2 (bracelets), Plate III, 19 (pin), Plate IV, 3-4 (pottery); modified by M. Lerchl).

Azerbaijan - especially east of Mingəçaur - only few finds can be assigned to the Achaemenid period.¹⁰¹

Armenia

Karchaghbyur

Near the small village of Karchaghbyur H. Mnatsakanyan excavated a total of 28 graves in the years from 1971-72. In some cases, the inventory of the tombs probably stems from the post-Urartian period, since it comprised goods that can well be assigned to the Achaemenid era.¹⁰² One of these tombs is grave no. 22 (Figure 10).¹⁰³ The vessels found there have some equivalents in the local pottery of the Middle Iron Age. A grey bowl had



Figure 11. Cosmetic set: kohl stick and kohl tube (Brosius 2006: 90, Figure a).

persisted from the Late Urartian until the Achaemenid period.¹⁰⁴ Also among the jewellery, some items can be dated to the Achaemenid period; for instance two bracelets with snake-headed ends and a concave indentation opposite their opening and a bronze pin with a castellated head.¹⁰⁵ Such pins used to be called *kohl sticks* and formed part of a cosmetic set (Figure 11).¹⁰⁶ Corresponding specimen were found in graves in Tall Jigan (Figure 12)¹⁰⁷ and Deve Höyük¹⁰⁸, in Kamid al-Loz (Figure 13c-f)¹⁰⁹, in Al Mina¹¹⁰, in Hazor (Figure 13a-

¹⁰⁴ Kroll 1976: 118 type 25.

¹⁰⁵ Yengibaryan 2002: 419 refers to the dating of the pin from Tawilan. Muscarella 1988: 358, however, points out that on account of the missing context it cannot with certainty be assigned to the 8th century BC.

¹⁰⁶ Curtis 1984: 35; Moorey 1980: 98. Apart from a *kohl stick*, such a cosmetic set also comprises a small glass vessel. For such *kohl tubes* especially in Georgia, see Gagošidze and Saginšvili 2000: 67-73.

¹⁰⁷ Ii and Kawamata 1984-85: 183 Figure 18. This is a brick grave (grave no. 22) with an adult in a sideways crouched position. The bronze *kohl stick* with the corresponding tubes seem to be the only grave goods. Here also see Curtis 2005: 192, who refers to both tube and pin as being 'of a distinctive type'.

¹⁰⁸ Moorey 1980: 98 no. 405 and no. 406.

¹⁰⁹ Poppa 1978: 56. Here also see Hachmann and Penner 1999: 220-221 with Plate 31, 1-4.

¹¹⁰ Woolley 1938: 147 Figure 25.

¹⁰¹ Knauf 2006: 96. Bill 2010: 17 mentions a grave from Mingəçaur, which is assigned to this period. The published grave goods are indeed non-Achaemenid (Chalilov 1971: 185-187).

¹⁰² Here also see Khatchadourian 2011: 487.

¹⁰³ Yengibaryan 2002: 418-420. Here also see Karapetyan 2003: 28.

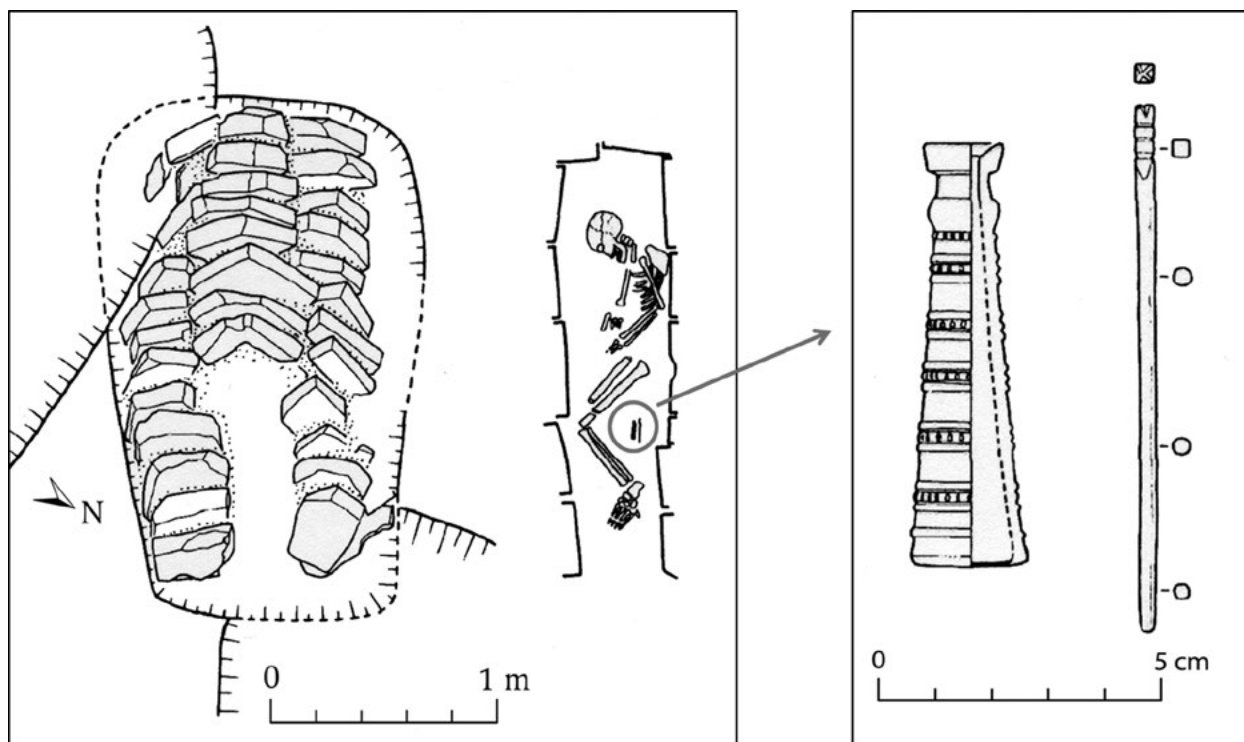


Figure 12. Tall Jigan (Ii and Kawamata 1984-85: 183, Figure 18).

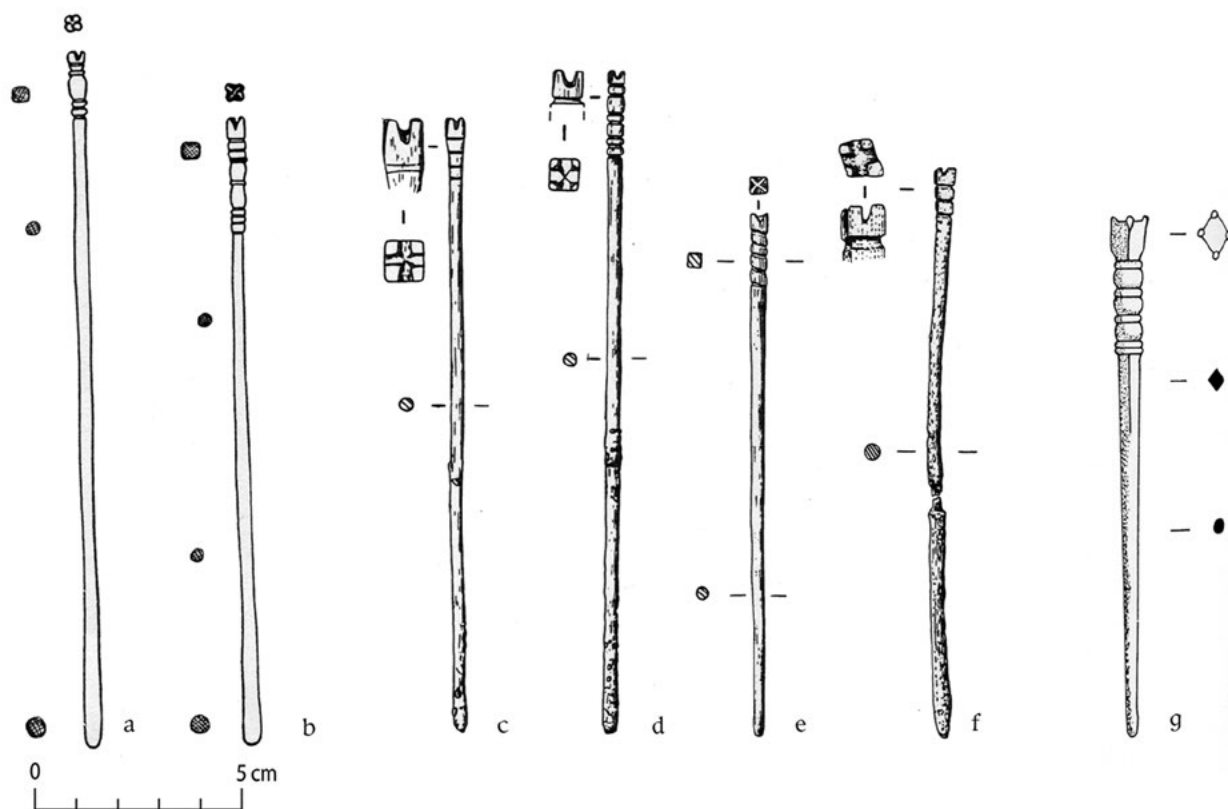


Figure 13. Pins with castellated head: a-b: Hazor (Yadin *et al.* 1989, Plate CXCI, no. 21 and no. 22); c-f: Kamid el-Loz (Hachmann and Penner 1999: 220-221 with Plate 31, 1-4); g: Pasargadae (Stronach 1978: 212, Figure 13)

b)¹¹¹, as well as in Pasargadae (Figure 13g)¹¹² and Vaske¹¹³ and can be clearly assigned to the Achaemenid era.¹¹⁴

Karmir Blur

Like in Oshakan, the buildings of the settlement of Karmir Blur were used as a burial ground in the Hellenistic era. Three of the graves there, however, stem from the 6th-4th century BC.¹¹⁵ In grave no. 1, a beaker with two handles was discovered, which H. Martirosyan directly compared with the depiction of the Armenian delegation on the donation relief in Persepolis.¹¹⁶ In the child's grave no. 2 in room 13, a bronze pin with a castellated head and concave bracelets were discovered (Figure 14). A silver drachma of Alexander the Great serves as *terminus post quem* for the grave furniture.¹¹⁷ The deceased of grave no. 3 was given a slim jug, a double vessel and a small beaker with a funnel-shaped rim to take with him.¹¹⁸

Ujan

At the southern border of the village of Ujan in the province of Aragatsotn a single grave was discovered in 1989. It is surrounded by a *cromlech* with a diameter of 5.4m. In the middle of the barrow, which only protruded by 0.4m, there was the grave chamber, which was built from vertical stone plates aligned in North-South direction. The body of the buried person was lying on its right side in a crouched position looking to the West. The grave goods were positioned in the southern part of the grave chamber: a pot, an iron sickle knife, beads made of various materials (glass, paste, serpentinite, clay), three clay spindle whorls,¹¹⁹ a bronze pin with a castellated head and two bronze bracelets with concave

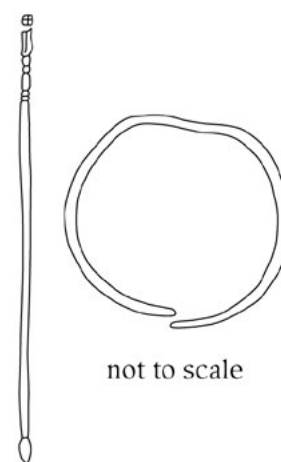


Figure 14. Karmir Blur: Grave goods from grave 2 (Vayman and Tiratsyan 1974: 65 with Plate II; modified by M. Lerchl).

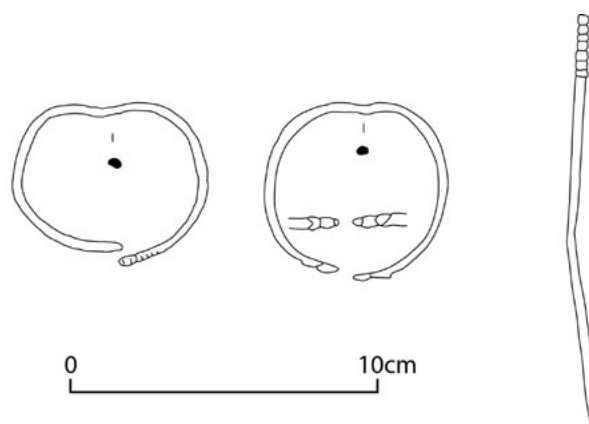


Figure 15. Ujan: Grave goods (Tumanyan 1993: 139, Figure 1; modified by M. Lerchl).

¹¹¹ Yadin *et al.* 1989, Plate CXCI no. 21 and no. 22. Both *kohl sticks* stem from areal A and are assigned to Stratum II (Persian Period). One specimen was found together with the corresponding tube in grave no. 10, while the other specimen was discovered in a cavity in room no. 144a in area K 17.

¹¹² Stronach 1978: 212 Figure 13.

¹¹³ Khalatbari 2004: 9 grave no. 3. Piller 2013: 138 mentions such *kohl sticks* in graves in Tul-e Talesh and Maryan.

¹¹⁴ One specimen from Nush-i Jan is much larger and furthermore cannot be dated exactly (Curtis 1984: 34-35). For the question about the dating of the specimen from Tawilan see note 105.

¹¹⁵ Khatchadourian 2008: 398 note 240. Karapetyan 2003: 24 dates these three graves to the 5th-4th century BC.

¹¹⁶ Martirosyan 1961: 140 Figure 63. Such beakers persisted for a long time. They used to be considered as the leading type of Urartian pottery, but on the basis of a reliable stratigraphical context they are nowadays assigned rather to the post-Urartian epoch. For a comprehensive discussion of these beakers cf. Herles and Piller 2013: 212-219.

¹¹⁷ Martirosyan 1961: 139; Vayman and Tiratsyan 1974: 63. Here also see Khatchadourian 2007: 67.

¹¹⁸ Martirosyan 1961: 142-144 Figure 66 and 68. Here also see Karapetyan 2003 Plate 23,2.

¹¹⁹ According to Piller 2013: 135 note 73, such clay spindle whorls are an indicator of the late phase of Iron Age graves in the region of Gilan in Northern Iran. While corresponding evidence for Iron Age I and II periods are missing, such clay spindle whorls were found in women's graves of the Iron Age III and IV period in Ghalekuti and Lameh Zamin.

indentations opposite their openings (Figure 15). At least one of the bracelets features snake-head ends. On account of the finds the excavators date the grave in Ujan to the 5th-4th century BC.¹²⁰

Georgia

Achalgori

The 'Treasure of Achalgori' consists of the rich inventory of a grave already discovered in 1908 in the Ksani valley.¹²¹ On account of lacking 'armament objects', J. Smirnov suspected it to be a woman's

¹²⁰ Tumanyan 1993: 146.

¹²¹ Smirnov 1934: IX-XI. These objects were originally discovered by farmers in Sadseguri, but sold in Achalgori, which gave its name to the finds.



Achalgori

Two pendants with horse figurines



Figure 16. Achalgori: two pendants with horse figurines (Lordkipanidze 2011: 56-57).

grave.¹²² About 100 objects overall are assigned to this grave. The buried woman was given several horses to take with her.¹²³ It is furthermore remarkable that the depiction of the harness on two pendants with horse figurines corresponds to the harness found in the grave (Figure 16).¹²⁴ One bronze standard is almost identical with a specimen from the grave finds in Kančāeti. The grave inventory is dated to the end of the 4th century BC, but most of the grave goods clearly stem from a somewhat earlier time.¹²⁵

Itkhvisi

About 5km from Airche, several richly-furnished graves were discovered and excavated in 1962-63, which are assigned to the 5th-3rd century BC.¹²⁶ Grave no. 0 was

separated into two areas by a small stone row. The larger area contained a male crouched person with his head turned westwards. In the smaller area there were some horse bones and a bit.¹²⁷ The grave goods comprised a.o. a silver omphalos phiale, a black-figured Kylix and a bowl with black varnish with the Greek graffito ΜΗΤΟΣ. The handle of a black polished jar exhibited the letters ΜΤΣ – probably in both cases the name of the buried person.¹²⁸ In grave no. 2 two jars (Figure 17) were discovered, which are assigned to the so-called *western triangle ware*¹²⁹, and bracelets with concave indentations.

Kančāeti

In 1960 a tomb with rich inventory was discovered here. It consists of wooden construction and it was covered with a stone plate measuring 2.2m × 1.3m.¹³⁰ Other tombs of this kind had already been looted at

¹²² Smirnov 1934: XV. Gobedžisvili 1952: 112, by contrast, considers it as a multiple burial of three buried individuals, without giving any further explanations however.

¹²³ Smirnov 1934: 53 believes that at least five horses, rather six, were in the grave (here also see Gagoschidse 1995b: 165; Lordkipanidze 2001: 150; Bill 2003: 210).

¹²⁴ Gagoschidse 1995b: 165.

¹²⁵ Gagoschidse 1995b: 166. Lordkipanidze 2000: 11; 2001: 182, by contrast, suggests a dating of the grave for the late 4th or beginning 3rd century BC.

¹²⁶ Bill 2003: 171; Knauß 2005: 198.

¹²⁷ Bill 2003: 172.

¹²⁸ Bill 2003: 172.

¹²⁹ For the incidence of *western triangle ware* on Georgian territory see Narimanishvili and Shatberashvili 2004: 121-123 and Ludwig 2010: 93-98. For general information on *western triangle ware* and its denomination see Dyson 1999: 101-110.

¹³⁰ Bill 2003: 184.

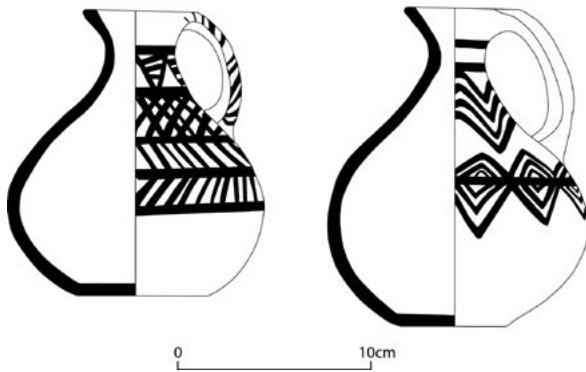


Figure 17. Itkhvisi: western triangle ware (Narimanishvili and Shatberashvili 2004: 134, Figure 6,7 and 9); modified by M. Lerchl).



Figure 18. Kazbegi: a silver omphalos phiale with the Aramaean inscription 'Kabbir' (Miller 2010: 895, Figure 9).

the time of its discovery. The grave contained a buried male in a crouched position with his head turned westwards; furthermore 79 objects. On account of the weapons as grave goods, this tomb is referred to as 'warrior's grave'.¹³¹ Among the grave goods were three complete horse harnesses. Of special interest were three silver rhombic objects on the eyes and lips of the buried person.¹³² Furthermore, two silver bracelets and one bronze bracelet were discovered, with concave indentations opposite their openings. The excavator I. Gagošidze at first dated the grave to the middle of the 5th century BC and later corrected it to middle of the 4th century BC.¹³³ O. Lordkipanidze is in favour of a dating to the Early Hellenistic period.¹³⁴

Kazbegi

As early as in 1877 a so-called treasure was discovered near the farm Kazbegi. Whether this was the rich inventory of a grave (according to the finder G. Filimonov¹³⁵) or a deposit of temple-offerings (according to F. Bayern¹³⁶ upon follow-up investigations in 1878) cannot be definitely clarified any more. No human bones are documented, but both cow and sheep bones.¹³⁷ Overall, the treasure consists of around 200 objects. These are above all parts of standards, figurines hanging on necklaces and little bells that presumably served cultic-ritual purposes;¹³⁸ besides, a silver omphalos phiale (Figure 18)¹³⁹ with the Aramaean

inscription 'Kabbir'.¹⁴⁰ The bowl, manufactured with repoussé technique, features six almond-shaped lobes with a decor of two stylized swan heads in between.¹⁴¹ The discovered objects are generally dated to the 6th-5th century BC.¹⁴² In 1879 further follow-up excavations were carried out at the find spot. Three adjoining graves were uncovered, which are assigned to the 4th-3rd century BC.¹⁴³ Whether these correlate with the so-called treasure find, can however not be determined with certainty.¹⁴⁴

Tsintsqaro

A single grave was discovered in 1940 in the Algeti gorge. The finders mentioned four big stones and a lot of ash. B. Kuftin reconstructed the grave on the basis of the preserved information and grave goods and declared it as Achaemenid.¹⁴⁵ Apart from a silver omphalos phiale and a silver phiale without omphalos, a typically Achaemenid glass bowl was found in the grave.¹⁴⁶ Especially interesting was a silver pin with a twisted body, which according to the published drawing featured a castellated head.¹⁴⁷ Further finds included bracelets with concave indentations, a silver ladle, bronze bits and various arrowheads (two iron ones with a triangle blade and a bronze one of the so-called Scythian type). S. Margišvili considers this grave as part of the burial ground of Šavsakdara II, the

or the first half of the 4th century BC.

¹⁴⁰ Fossing 1937: 126.

¹⁴¹ Abka'i-Khavari 1988: 106. The bowl has its direct equivalent in a bowl from Ialysos on the isle of Rhodes, which suggests that both bowls were manufactured in the same workshop, possibly in Anatolia (Miller 2010: 873).

¹⁴² Gagoschidse 1995a: 163-164; Knauß 2005: 198-199.

¹⁴³ Kuftin 1941: 45; here also see Bill 2003: 187.

¹⁴⁴ Gagoschidse 1995a: 163.

¹⁴⁵ Kuftin 1941: 34; here also see Bill 2003: 158.

¹⁴⁶ Knauß 2005: 1999 talks about 'Achaemenid glass bowl'; Bill 2003: 158 is more reserved and writes 'vielleicht achämenidisch' (maybe Achaemenid).

¹⁴⁷ Bill 2003: 158 and Plate 15,17.

¹³¹ Bill 2003: 184.

¹³² Bill 2003: 184.

¹³³ Here see Bill 2003: 184.

¹³⁴ Lordkipanidze 2000: 11; 2001: 184.

¹³⁵ Tallgren 1930: 110.

¹³⁶ Bayern 1885: 42. Here compare Mansfeld 2002: 807.

¹³⁷ Gagoschidse 1995a: 163; Bill 2003: 187.

¹³⁸ Gagoschidse 1995a: 164.

¹³⁹ Gagoschidse 1995a: 163 considers the silver bowl as 'an Achaemenid work'. Abka'i-Khavari 1988: 106 suggests to date this bowl, like the specimen from Achalgori, to the 6th century BC. Lordkipanidze 2001: 168 note 103 rejects this and prefers the late 5th

graves of which date back to the 4th-3rd century BC.¹⁴⁸ O. Lordkipanidze has assigned this grave – just as the above-mentioned examples – to the Early Hellenistic period.¹⁴⁹

Concluding Remarks

In many areas of the Achaemenid Empire no change within the local cultures can be recognized after their conquest by the Persians. This also applies to the Southern Caucasus. However, it apparently entailed a decline in population all over the Armenian Highlands.¹⁵⁰

Neither does the archaeological material of the area of Nakhchivan prove any Achaemenid influence that led to a change in local cultures.¹⁵¹ This is congruent with the archaeological record in the area east of Lake Van towards Mount Ararat. Also there, the Late Iron Age is scarcely documented, but there is some record of *western triangle ware*.¹⁵²

Strangely, the *western triangle ware* seems to be missing on today's Armenian territory.¹⁵³ In Azerbaijan there exists painted pottery of dark red colour on a yellowish slip, which however is less assigned to the *western triangle ware* but rather to the *Samadlo Style*, which was common from the middle of the 3rd until the beginning of the 2nd century BC.¹⁵⁴

Judging from the overall grave finds, only some individual graves can be assigned directly to the Achaemenid period. They are in part tombs with a rich inventory.

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¹⁴⁸ Margišvili 1992: 110. Here also see Bill 2003: 157. For the burial ground of Šavsakdara II see Bill 2003: 220–221. The burial ground of Šavsakdara I dates back to the 5th-3rd century BC. (see Bill 2003: 219 and Herles 2014: 142–143).

¹⁴⁹ Lordkipanidze 2000: 11; 2001: 184.

¹⁵⁰ Dusingberre 2013: 182.

¹⁵¹ Bakhshaliyev and Marro 2009: 32.

¹⁵² Marro and Özfirat 2005: 333.

¹⁵³ The pottery of the Early and Middle Iron Age in Armenia did not continue the tradition of painted pottery of the 2nd millennium BC. Only in the 4th century BC the painting of pottery was resumed. Mostly, this was a polychrome painting (here see Ter-Martirosov 1974: 53–71 and Ludwig 2010: 95 note 1266).

¹⁵⁴ Ludwig 2010: 95 n. 1267; Narimanishvili and Shatberashvili 2004: 124.

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Quarlini – Teišebaini – Kavakert – Karmir Blur

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Abstract: If we return once more to the history of Karmir Blur, we will see that the hills and surrounding territory called ‘Quarlini valley’ were inhabited in the Late Bronze Age and demonstrates a continuous interesting cultural life full of trials, until 6th century BC. In the 7th century BC, a town called Teišebaini was established there. The territory of the Urartian town in front of the citadel was transformed into the necropolis at the end of the 6th century BC. A fortified estate was established here in early medieval period, which was transformed into settlement in the 12th-13th centuries. In the 14-15th centuries the settlement was abandoned. It was again re-inhabited in the 16th century and abandoned at the beginning of the 17th century. In the first half of the 17th century it was again re-inhabited by the people moved here from Van and Mush plains.

Keywords: Armenia, Urartu, Karmir Blur, numismatics, necropolis, chronology

Karmir Blur site is located in Shengavit administrative district in the southern limits of Yerevan, on the left bank of river Hrazdan (‘Ildaruni’ in Urartian sources of the 7th century BC) situating on plateau cut by gyre of river, the upper geological layer of which is formed by boulders, and sandy clay sediments. The rocks bordering plateau from south and south-east sides are sloping to Hrazdan canyon, and it is surrounded by shallow depressions on the west and south-east. The hill on the edge of the Hrazdan river gorge, formed on basalt sediments, dominates over the plateau, where the citadel of the Urartian town is located (Figures 1-2).¹

The initial name of the site is not known exactly. It is, however, known that town established here by the King of Van Rusa – the son of Argišti in the 7th century BC, was called Teišebaini.² Teišeba was the god of the nature elements of the Van kingdom, occupying the second position after supreme god Haldi by hierarchical system of deities in the Urartian official pantheon.

The town was founded in the territory of Waza (Uaza),³ a land figuring among the state formations of the confederation called ‘the land of Etiuni. The region where Teišebaini was built in the 7th century BC, between the cities of present-day Yerevan and Ejmiadzin, was known by two names. The older name was Quarlini⁴ (another reading – Quartune⁵). The later name was ‘Rusaini hūbi’⁶ (‘Rusa’s valley’) called after the name of the King Rusa II (685-645 BC), the founder of Teišebaini.⁷

Catholicos of the Armenians Simeon Yerevanc’i mentioned Kamir Blur as ‘Kavakert’ in his significant work called ‘*Jambir*’,⁸ and the valley around the site was figuring as ‘Kavakert field’. Later, the inhabitants of surrounding villages have given to this place the name Karmir Blur (‘Red Hill’ in Armenian), perhaps due to visible layer of burnt reddish bricks.⁹

Investigations of Karmir Blur site were started in 1927. In 1929 the surrounding territory of the site was declared a closed archaeological zone. Investigations in Karmir Blur area were restarted again in the spring of 1936, and further intensified in that summer, when the pupils of Verin Charbakh village school discovered a stone with inscription of King Rusa II near ruined church walls, in a stone pile. The inscribed stone was sent to the History Museum of Armenia by an employee of Geological administration Armenian SSR, A. P. Demyekhin (in future, the director of the Institute of Geological Sciences).¹⁰ It was a part of a large inscription found later in 1962.¹¹ Systematic excavations of Karmir Blur began in 1939 with three separate expeditions, within a joint project. The expedition of the Armenian branch of AS (Academy of Sciences) USSR was supervised by S. V. Ter-Avetisyan (1940-1941), the expedition of the Committee of Preservation of Historical Monuments of Armenia was supervised by K. G. Ghafadaryan (1939) and the head of the State Hermitage Museum’s expedition was B. B. Piotrovskij (Figure 3). After the II World War the expedition of the Institute of History, NA of the Armenian SSR, later, the expedition of the Institute of Archaeology and Ethnography, AS of the Armenian SSR and the State Hermitage Museum was supervised by B. B. Piotrovskij. Excavations were stopped in 1972¹² and restarted in 2013 under the

¹ Piotrovskij 1950: 7.

² Piotrovskij 1950: 21.

³ Harutyunyan (Arutjunjan) 1966: 82-84.

⁴ Melikishvili 1954: 66. The toponym Quarlini is connected with the cult of Quera (Harutyunyan 1970: 352) in Van kingdom, and Armenian dragon-like deity Kuar (Hmayakyan 1990: 53).

⁵ H. H. Karagyozyan links the name of the famous Medieval temple of Zvartnots with this toponym (1998: 136-138).

⁶ Harutyunyan (Arutjunjan) 2001, Text no. 421.

⁷ Harutyunyan (Arutjunjan) 2001: 519.

⁸ Hakobyan *et al.* 1988: 965; Israelyan 1979: 331-332.

⁹ Piotrovskij 1950: 13.

¹⁰ Ghafadaryan 1937: 222.

¹¹ Piotrovskij 1966: 7.

¹² Piotrovskij 1950: 15-16; Yesayan 1982: 13.

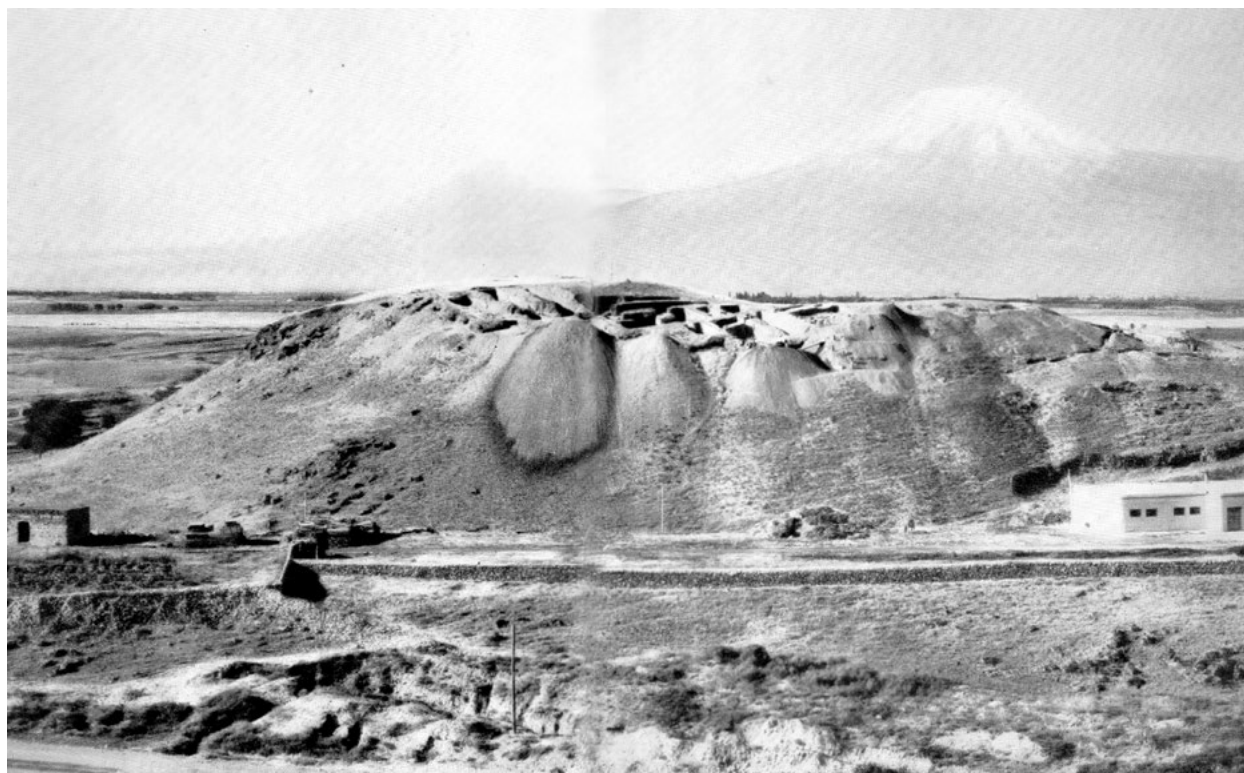


Figure 1. Karmir Blur fortress during excavations.

supervision of H. Simonyan. The real space of the site is uncertain, but it is estimated not less than 40 ha. The research revealed that the site had five archaeological levels: 1. Late Bronze – Early Iron Age settlement (13th-8th centuries BC); 2. the Urartian fortress, town quarters, private residences, and cemetery of the local inhabitants (13th-6th centuries BC); 3. tombs, dated back to the end of the 6th century BC – 3rd century AD; 4. poorly preserved medieval structures and a church, 5. late medieval settlement, occupied by a village (17th-19th centuries). The chorological upper limits of the necropol's existence as well as the late medieval settlement have been confirmed through numismatic data.

As a town Teišebaini was abandoned in the 6th century BC.¹³ Since that period the northern quarters of the town have been used as a necropolis. Nine burials were excavated here; some burials were discovered accidentally, and to date have not been appropriately recorded. The materials were published by H. A. Martirosyan, A. A. Vaiman, and G. A. Tiratsyan.¹⁴ The graves represent stone boxes with not large oval-shaped burial chambers. Urartian column bases sometimes were used in construction of the burial chambers. The orientation of the longitudinal axis is different: north-

south and east-west. The deceased persons were buried in 'fetal' position, laying on one side or sitting position.

There were one or two deceased persons buried in each tomb. Ceramic vessels, bronze beads were found in the burials of Early Armenian period (6th-4th centuries BC) unearthed in the so called 'house of a prominent Urartian,' while in later burials of Hellenistic period (3rd-2nd centuries BC) ceramic vessels were lacking.

A double-handled pitcher found in one of the burials was the main dating material for the Early Armenian tombs. Its analogue, according to H. Martirosyan, we can find in the bas-reliefs in Persepolis, where a similar vessel is depicted in the hands of an Armenian herald, who offers gifts to the Achaemenid king. The dating of Hellenistic burials was determined by silver coin of Alexander the Great of Macedonia, found in 1948 from child's burial discovered in the main street of Teišebaini (Figure 4). On the obverse of the *drachma* head of Heracles covered by a lion hide is depicted. On the reverse is Zeus sitting on throne with eagle on his right outstretched hand and staff on left hand. Bellow of his left hand, near his knees, there is an image of lion looking back. The legend of coin is unreadable. The image of a lion in reverse suggests where the coin was minted. This image was armorial symbol of town Kardia in Thrace and is depicted on the coins of Philip II and Alexander. When the people of Kardia moved to

¹³ Hmayakyan 1998: 12-14.

¹⁴ Martirosyan 1961: 137-150; Vaiman and Tiratsyan 1974: 60-70.

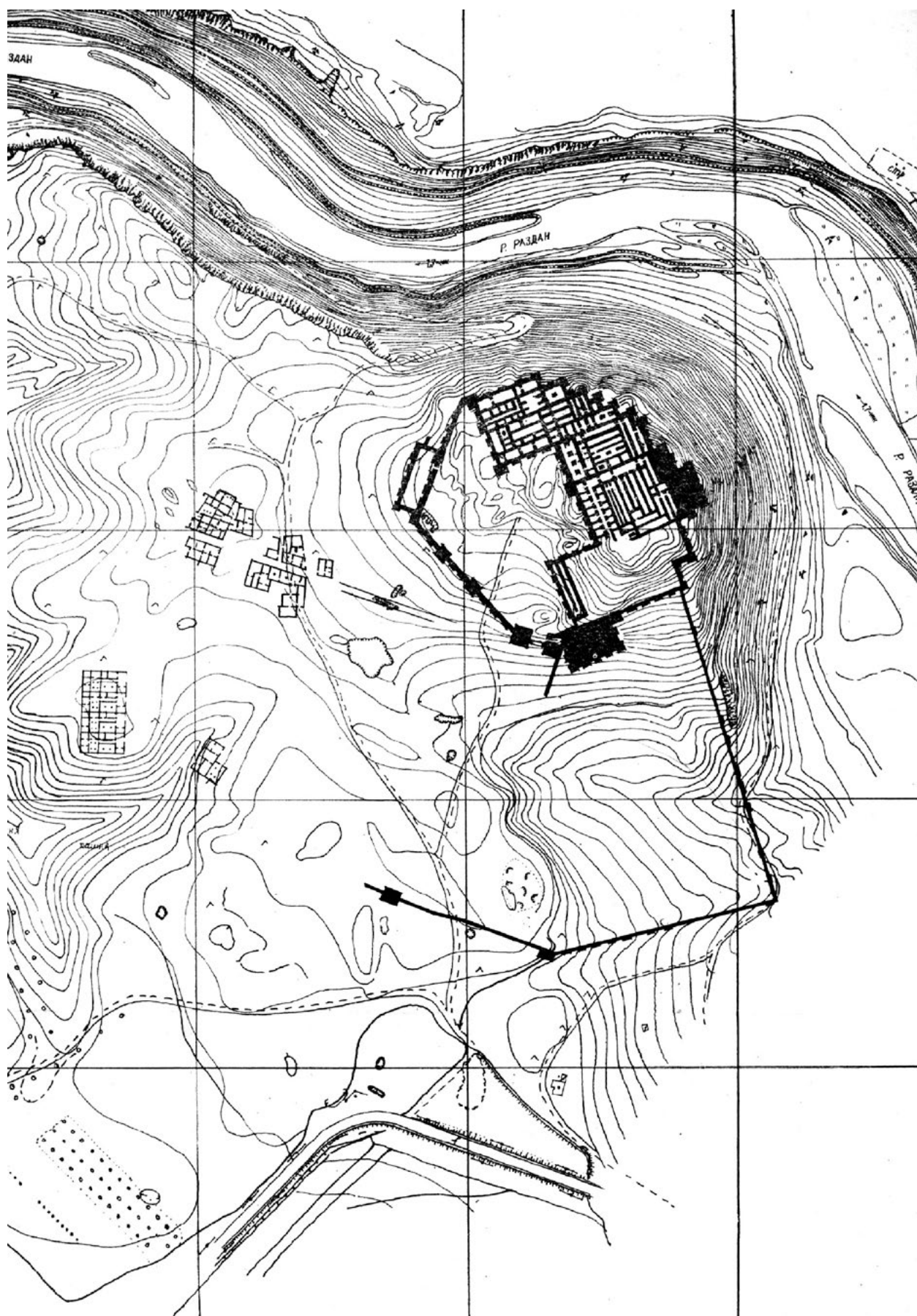


Figure 2. Karmir Blur topographical survey.



Figure 3. Boris Piotrovskij, Karo Ghafadaryan and Harutyun Mnatsakanyan in Karmir Blur.



Figure 4. A coin of Alexander III of Macedonia, drachma, 3.91g., 17.6mm. Issued in Kardias. Preserved in History Museum of Armenia, no. 1791. Found in Karmir Blur, in 1948.

Lysimachia, this sign appeared on the local coins as well. Boris Piotrovskij, Gevorg Tiratsyan and Ayzek Vaiman, who have published the coin, suppose that it could be minted either in the reign of Alexander the Great or on his behalf but after his death. The coins struck in Kardias and Lysimachia are dated the last quarter of the 4th century, not later than 306 BC, when similar coins began to mint on behalf of Lysimachus. The coin was in the mouth of the deceased and intended for Charon. This habit was typical of the Greeks, Etruscans and Latins. According to the archaeological data, it was also characteristic to the Armenians, as there are burials with an Alexandrian coin in the mouth of the deceased found from Garni, Karin etc.¹⁵

As a rule, in Greece in burial practice small silver denomination – *obolos* was put in mouth of the deceased, while in Hellenistic Armenia it is of higher value – *drachma*. The lack of an *obolos* in the burials could be explained by the conditions related to the inner market not being as developed in Armenia in the 4th-2nd centuries BC, and low cost currency units, which were aimed for the retail trade, had no wide circulation there.

It is noteworthy that the drachmae with an image of Alexander the Great, issued in the various mints of the Hellenistic world, mostly after his death, are often found in the burial rite, which is possibly connected with the 'divine' image of Alexander. There were other coins found in tombs of Karmir Blur, which are dated back to pre-Christian or early Christian period: Parthian drachma of Artabanus II (10-38 AD) issued in Ecbatana (Figure 5), as well as coins of the Sasanian King of Kings Shapur II (309-379) (Figure 6), and Roman emperor Constantine I (317-337 AD) (Figure 7). These materials outline the last period of existence of the Hellenistic necropolis (4th century AD) when Christianity was adopted as a state religion and the older traditions had not been forgotten yet. The lowest limit of the necropolis existence is currently unknown, but this place beginning of 9th century is mentioned as Kavakert country estate by medieval Armenian historians Hovhannēs Draxanakertc'i¹⁶ and Step'anos Orbelean.¹⁷

¹⁵ Piotrovskij 1950: 19, Vaiman and Tiratsyan 1974: 63-64.

¹⁶ Hovhannēs Kat'olikos Draxanakertc'i 1912: 112-114.

¹⁷ Step'anos Orbelean 1910, chapter 55.



Figure 5. Drachma of Artabanus II of Parthia issued in Ecbatana. 3.50g, 20.0mm. Stored in History Museum of Armenia, no. 17965. A copper soldered pendant. Karmir Blur, 1965.



Figure 6. Drachma of Shapur II, 4.07g, 22.7mm. Stored in History Museum of Armenia, no. 17831. Found near Karmir Blur, in a vegetable garden, 13.VII.1963. Received from B. B. Piotrovskij.



Figure 7. Rome, Constantine I (306-337), folis (drachma), 2.86g, 19.6mm. Issued in Cyzicus, 324-325. Stored in History Museum of Armenia, no. 18160. Found in Karmir Blur, 1968.

A poorly preserved Abbasid coin found in Karmir Blur is dated to the same period (copper fels struck in the end of the 8th – beginning of the 9th century AD) and

is preserved in the department of numismatics of the Hermitage.¹⁸

Thus, the settlement was inhabited in the 9th century, which coincides with the contemporary written data, in which Kavakert is described as a fortified estate. Following this reasoning, it is most likely that Kamir Blur is the settlement Kavakert mentioned in ‘-ambr’. The only evidence for this comparison is the etymology of the name Kavakert. The study of Kamir Blur as a medieval settlement begun in 1927, motivated by the existence of a church on the top of the hill. At that time three church walls remained standing on one-meter in height. Unfortunately, in 1936, the smoothed stones of the walls were moved and used as grave stones. Based on the research of these stones (among which were also numerous architectural decorations) K. G. Ghafadaryan noted that ‘once there stood a beautiful medieval building.’

In 1939, when systematic excavations of Karmir Blur started, the Armenian expedition discovered a late medieval building consisting of several sections on the western side of the hill. The expedition conducted an investigation of the church and its surroundings. The stone walls were unearthed under the church foundations and near the foundation, as well as numerous medieval *pithoi* fragments where found to the north-east of the church. During excavations other medieval artefacts also were found. Based on the analysis of these materials, that layer is dated to the 10-14th centuries. Here, on the upper layer of the hilltop was excavated an area of 192m². There are not earlier building materials discovered here except for several building stones, worked in the Urartian manner. It was clarified, anyway, that the church was built on a high Urartian mud brick wall. Another medieval structure was excavated on the north-eastern slope of the hill, within the trench above the Urartian fortress wall and its surrounding area. That structure was built of accurately smoothed small stones. In addition, glass bracelets, glazed and unglazed ceramics (Figures 12-13), as well as iron tools were found.¹⁹

Hovhannēs Drasxanakertc’i is the earliest writer who mentions Kavakert, concerning the occurrences of the second quarter of the 9th century, specifically a Kavakert battle. Kavakert is described as a beautiful and prosperous estate belonging to the catholicosate and surrounded by fields (*agaraks*). The Arab governor Khuzaima wished to seize it along with other settlements. ‘During the pontificate of this patriarch, a certain governor (*ostikan*) named Khuzaima (Xuzima) came to the city of Dvin and tyrannized his subjects. 21. He noted the beauty of the superb estates (*dastakert*) of

¹⁸ Dobrovolsky 1993: 60-61.

¹⁹ Ghafadaryan (Kafadarjan) 1940: 26-36.



Figure 8. Bagratids of Georgia, Queen Tamar, fals, copper, 9.23g, 27.1mm. Issued in Koronikon 420 = 1200. Stored in History Museum of Armenia, no. 18161. Found in Karmir Blur, 1968.



Figure 9. Iranian fals, copper, 8.96g, 25.5mm. Issued in Yerevan in 1104 AH (1693). Stored in History Museum of Armenia, no. 17837. Found within the territory of Karmir Blur, 1953.



Figure 10. Iranian fals, copper, 12.61g, 22.7mm. Stored in History Museum of Armenia, no. 14739. Found in quarry of Karmir Blur, in April, 1941.

the catholicosate, that is to say, Artašat, Kawakert and Horovmoc' Marg together with their fields (*agaraks*).²⁰

²⁰ Simeon Kat'olikos Erevanc'i 2003: 258.



Figure 11. Golden coin of Sultan Mahmud II, minted in Constantinople. Found from the eastern slope of the hill, in 2007, preserved in a private collection.

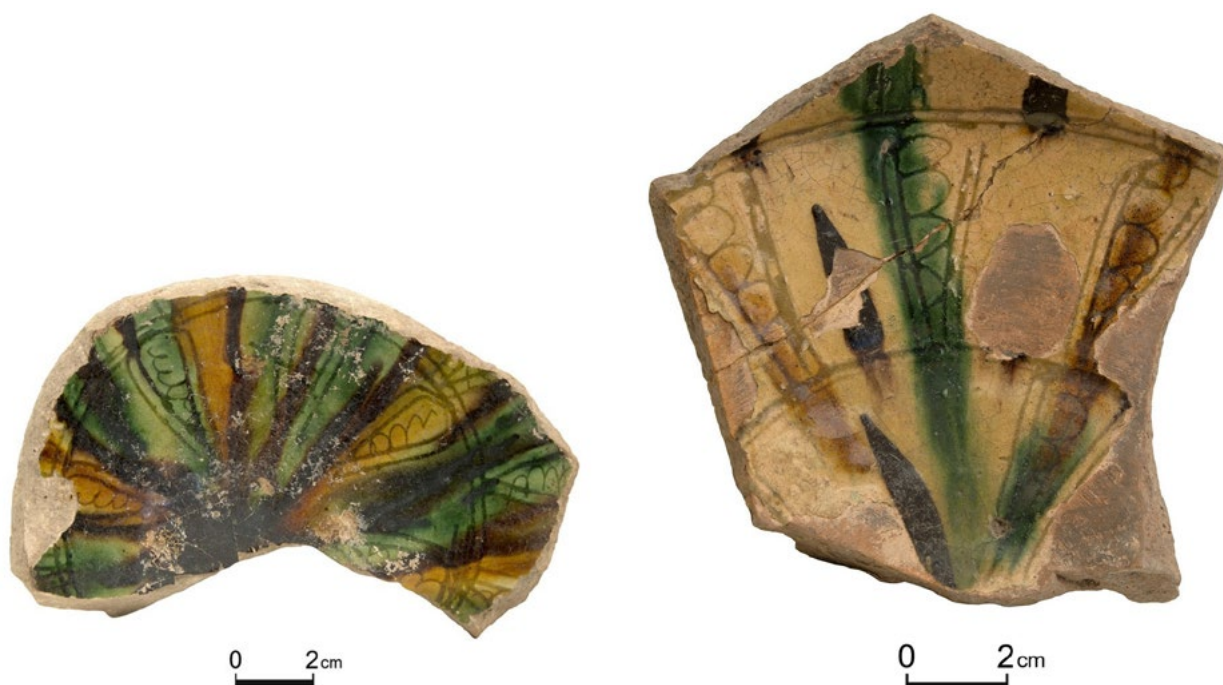
During the reign of the Catholicos Davit II (805-833), rebellions broke out in Armenia against the Caliphate. The revolt was headed by Sevada, the Persian prince, the husband of Arusyak Bagratuni, as well as by *sparapet* (General-in-Chief) Smbat and Prince Sahak Syuni. The rebels consolidated an army on the bank of the Hrazdan river, in front of Kavakert fortified estate. The army waited for the enemy to attack, protecting its rear and flanks by the river as well as the old and new fortification constructions. The two-thousand army of the *ostikan* (governor) Hal approached Kavakert from the east, where the natural barriers were easily overcome and then using the cavalry, the striking power of the Arabic army, would be able to provide results. Despite their favourable position, the rebels lost it, having no viable escape route, and they were totally defeated.²¹ As a result Kavakert was captured. Step'anos Orbelean also mentions Kavakert connected with the same battle calling the place '*avan*' (settlement).²²

These references evidence, that Karmir Blur had a military-defence function and continued to serve as a fortress due to its geographically accurate position in the early medieval period.

The settlement was repopulated for the fourth time in the 10th century AD, as K. G. Ghafadaryan suggests. Demonstrating the prosperous life of the settlement it is necessary to connect it with the period of the Zakarian principality (12th-13th centuries), when the inhabitants of the towns destroyed by the Seljuk rulers

²¹ Hovhannēs Kat'olikos Draxanakertc'i 1912: 112-114.

²² Stepanos Orbelyan 1910, chapter 55.



Figures 12-13. Shards of the medieval-era glazed plates from Karmir Blur, Stored in History Museum of Armenia.

moved to the village settlements, transforming them into bigger *avan*-settlements. The inhabitants of these settlements were engaged in crafts and trade along with agriculture. This fact can be proved through the numismatic and archaeological data, in particular, by the fine glazed ceramics found during the excavations (Figures 12, 13).

B. B. Piotrovskij describes the 11th-12th century settlement in Karmir Blur as 'a fortified estate.' Two copper coins of Seljuk *atabeks* of Ildegizids accidentally found on the hill became the basis for dating this layer. One of the coins is struck by the names of Šams-al-dīn Īldegiz (1137-1175) and his overlord Muḥammad bin Dā'ūd Čaġrī Beg (sultan Alp Arslan, 1063-1072), and the second one – Mozaffar-al-dīn Qezel Arslān 'Oṭmān (1186-1191) and his overlord sultan Sanjar Aḥmad bin Malekšāh (1118-1153).²³ The coin issued Bagratid Queen of Georgia Tamar (1184-1213) is also struck in the same period (Figure 8). The absence of materials dated to the 14th-15th centuries, as well as additional data, indicate that Turkmen invasions were crucial for Kavakert and it was abandoned again, or survived in a very poor conditions.

The village rebuilt in the 16th century was again abandoned after 1604, when Safavid Shāh Abbās I of Persia (1587-1629) resettled its inhabitants in Iran, but soon Amirguna Khan of Yerevan (1605-1625) invading

Van and Mush valleys moved some of its Armenian population and resettled them in Kavakert.²⁴ Two Iranian copper coins dated to the 17th century were found in Karmir Blur (Figures 9-10). One of these coins was minted in Yerevan (Figure 10).²⁵

In 1690s *melik* Sahak Yerevanc'i had a *ding* (a tool to peel rice or grain, which was worked by foot or water) in Kavakert, and he presented this to Holy Ejmiadzin during the period of Catholicos Astvacatur (1715-1725). In addition, Holy Ejmiadzin had other properties there: sowing lands, water mill, etc.²⁶

The sixth rebirth of this settlement lasted until the end of the 19th century. Evidence of this rebirth is indicated by the Ottoman gold coin found there (Figure 11) issued in Constantinople, in the first year of reigning of the Sultan Mahmud II.

It is noteworthy that the population of Kavakert participated in the defence of Yerevan during the siege of the town by the Ottoman army in 1724²⁷ and reconstructed the nearby Urartian canal (named

²³ Piotrovskij 1950: 13; Dobrovolsky 1993: 60-61.

²⁴ Zak'aria K'anak'eřc'i 1969: 70; 2013: 45.

²⁵ These coins are stored in HMA. We are grateful to Ruben Vardanyan, the head of numismatics department in History Museum of Armenia, for providing the numismatic material of Karmir Blur.

²⁶ Simeon Kat'olikos Erevanc'i 2003: 200, 258, 261-262, 373-374.

²⁷ Hakobyan et al. 1988: 965.

Umešini in the Urartian period), expanding it to Ejmiadzin.²⁸

Karmir Blur is the first Late Bronze and Early Iron age site excavated in Armenia. The second phase of development of the Urartology begins from investigation of Karmir Blur. The study of medieval urban-type settlements in the Republic of Armenia also has been started with excavations of this site. During the long-term activity of Karmir Blur expedition, numerous Armenian and Russian archaeologists and orientalists developed deeper knowledge.

In spite of the fact, that during the Soviet times a large part of the site was turned into a cemetery, the fortress, with its residential areas and the ancient cemetery still keeps its significance and now is protected by the state.

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²⁸ Piotrovskij 1950: 19.

Wine in Libation Ritual

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Abstract: Excavations of the Late Bronze and Early Iron Age tombs carried in 2009-2014 at the sites of near the Shnogh and Teghut villages, Lori marz, Armenia, yielded interesting findings connected with libation in funeral rite. The ancient tradition of libation is still preserved in funeral rite of the Armenians, when food and wine are served to the participants of the ceremony in the memory and as an offering to the soul of the deceased, in spite of the fact that Armenian Apostolic church prohibits the libations and considers the libation of wine as a pagan rite.

Keywords: Late Bronze and Early Iron Ages, tombs, pithoi, funeral rite, wine, libation

The ancient rituals inherent to religious festivals and ceremonies were mainly meant for awakening life, bringing fertility, abundance, peace and prosperity. Liquids to be poured at religious ceremonies varied including water, oil, milk, must, wine or other beverages.

Wine used as a ritual beverage during any secular or religious event was the most important component of the social and family ceremonies since the antiquity.

Wine was poured at the religious ceremonies as a bloodless offering to the gods and souls of the dead maybe because it was identified with blood since the most ancient times (at least the Bronze Age). In the Indo-European tradition wine was offered to gods, poured on the animals to be sacrificed.¹

Excavations of the Late Bronze and Early Iron Age tombs carried in 2009-2014 at the sites of 'Bagheri Tzhala' located in the vicinity of Shnogh village and 'Bardzryal' – nearby and within of Teghut village, Lori marz, yielded interesting findings connected with libation in funeral rite.

The site of 'Bagheri Tzhala' situated 2.5 km south of Shnogh village, at the elevated left bank of an inflow 'Kharatanotsi jur' to the Shnogh river was (as hinted by its name) a traditionally gardening area where wine growing had probably once prevailed.²

15 out of 32 tombs of the 13th-12th centuries BC excavated at that site contained small *karases* (pithoi) of wine and various other vessels put near the deceased. 8 of the *karases* were buried in additional pits dug in the chamber floor. The *karases* with versatile cups that were put into them had rough stone lids where the head of the deceased was resting. We found different horn- or rhyton-shaped cups without handles (Plate 8.6-10) in nine tombs; cups with a single handle in 17 tombs, and

pitchers – in 20 tombs. The rhytons as ritual vessels developed and acquired their final form and perfection as late as in the first half of the 1st millennium BC only.³

Tomb 1 is directed from east to west, armour sizes: 1.7 × 1.2m, the chamber contained 8 ceramic vessels one of which was buried in a pit dug in the western side, and no traces of humans.

Tomb 2. Armour sizes: 1.8 × 1.5m, the chamber (1.2 × 0.7 × 0.7m) masonry was laid horizontally, of oblong pebbles and pieces of andesite. The corpse was dismembered. There was a jug with wide opening in a pit to the west of the chamber centre, another jug with rounded body and a little convex pitcher with a handle were put on the floor by its side close to the southern wall. Opposite them, under the northern wall there was a small vessel. The bones of the deceased were piled irregularly in the centre of the chamber with a one-handled cup atop of them.

Tomb 4. The western side of the chamber (1.4 × 0.75 × 0.7m) directed from east to west had a stone filling (1.3 × 0.75m). Walls were made of vertically laid oblong pebbles and fractures of andesite. The body was dismembered. The skull was put in a small bowl at the southern wall, west of the centre. A flat stone in the centre near the bowl appeared to be the lid of a *karas* buried in the floor. It seemed the bowl had slipped from that lid (Plates 1.1-4; 5.4).

Another bowl put closer to the southern wall contained animal bones. Other finds consisted of a bronze bracelet, two bronze rings, cornelian and paste beads.

Tomb 16. The western side of the chamber (1.45 × 0.9 × 0.7m) directed from east to west had a stone filling (1.8 × 0.7m). The walls were made of vertically laid oblong pebbles and fractured andesite.

¹ Gamkrelidze and Ivanov 1984: 652; Tumanyan 2008: 18.

² Hobosyan 2014: 68.

³ Arakelyan 1976: 37.



Plate 1, Figure 1



Plate 1, Figure 2



Plate 1, Figure 3



Plate 1, Figure 4

The skeleton that was probably dismembered was laid on the right side, in a somewhat writhed position. The skull was in a large bowl put in the western side of the chamber. Opposite the skull under the southern wall there were two bowls, a pitcher, a cup and a jug. Another



Plate 2, Figure 1



Plate 2, Figure 3



Plate 2, Figure 2



Plate 2, Figure 4

jug was buried under the skeleton in the centre of the floor (Plates 4.1; 5.1; 7.1).

Tomb 19. The western side of the chamber ($1.5 \times 0.8 \times 0.55\text{m}$) directed from east to west had a stone filling ($1.8 \times 0.7\text{m}$). Closer to the surface in the central part of the chamber there was a large ceramic vessel. The skeleton

was writhed on the right side, in the inner layer of the central part.

There was a cup opposite the skull and a large bowl on the hip and stomach. Three single-handled pitchers were put under the northern wall. A vessel dug in a

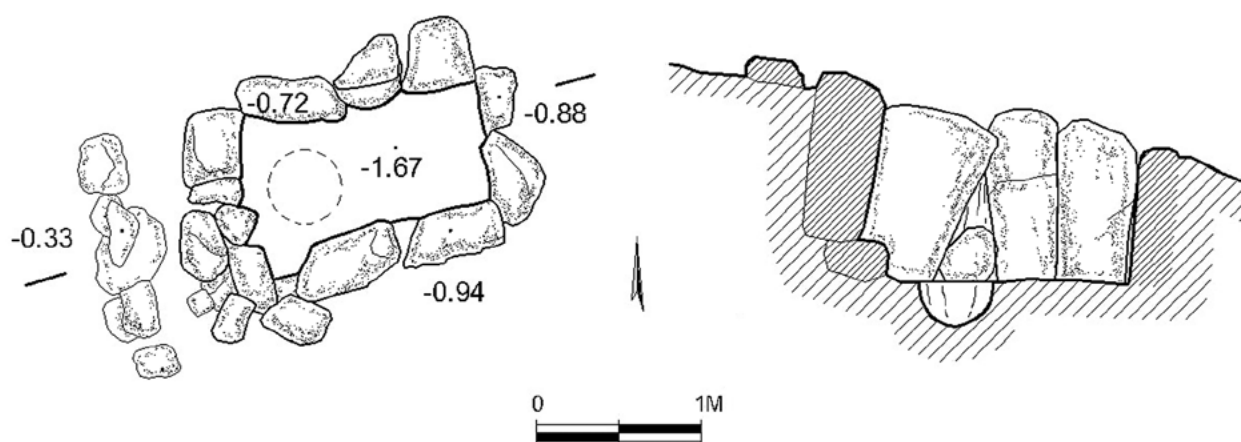


Plate 3, Figure 1



Plate 3, Figure 2

0.8m deep pit was to the west of the chamber centre (Plates 4.2; 5.3; 7.4; 8.5).

Tomb 21. The western side of the chamber ($1.25 \times 1.05 \times 0.7\text{m}$) had a stone filling ($1.8 \times 0.8\text{m}$). The walls were made of vertically laid oblong pebbles and fractured andesite.

The skeleton of the deceased was writhed on the right side in the centre of the chamber. The skull was on a flat stone, which also served as a lid to the *karas* buried in the floor. There was a piece of obsidian in the nasal cavity of the skull (Plates 2.1-2; 4.3; 5.5; 8.4).

Tomb 24. The western side of the chamber ($1.5 \times 1.05 \times 0.73\text{m}$) directed from east to west had a stone filling ($1.9 \times 0.5\text{m}$). Although the chamber contained no human remains we found two bowls on a flat stone in its western part and a ceramic vessel buried under one of the bowls, a small jug, a single-handled pitcher and a cup were put in the north-west corner of the chamber



Plate 3, Figure 3

and another cup opposite them. In the south-east corner we found a bowl, another cup and a small jug. Other finds consisted of two bronze bracelets, an awl, cornelian and paste beads (Plates 4.4; 5.2, 6; 8.3).

Tomb 25. The skeleton in the chamber ($1.7 \times 0.8 \times 0.63\text{m}$) directed from east to west was laid writhed on the left side. The skull lay near the south-western corner of the chamber. There was a small cup in the hand of the deceased, a small pitcher slightly dug in behind his waist and a bowl beside the stomach. Five ceramic



Plate 3, Figure 4

vessels were put opposite the corpse. A dug in medium size jug was found under the hip of the deceased.

Tomb 26. The chamber ($1.55 \times 1.15 \times 0.84\text{m}$) directed from east to west was built of large andesite stones.

The deceased was dismembered, his bones were put in the central section of the chamber but the part of his hip was found in a large bowl standing eastwards of the centre while other parts of the skeleton were in two of three other bowls standing under the northern wall (Plate 8.1, 2). There was a cup for wine in one of two jugs put near the same wall. A flat stone under the large bowl in the eastern part was a lid of a large dug in vessel. North of it in the central part of the chamber there was another dug in ritual pitcher.

Tomb 27. The walls of the chamber ($1.7 \times 1.05 \times 0.7\text{m}$) directed from east to west were built of vertically laid oblong pebbles and fractures of andesite.

We found a small jug and a cup at the back of the deceased under the northern wall and two bowls in the centre of the same wall. A vessel with handle was put under the ankles of the deceased while a single-handled pitcher and a single-handled cup were put in front of his waist. In the south-western corner there was a bronze spear. The skull rested on a pitcher dug in at the depth of 1.3m in the western part of the chamber (Plate 2.3-4).

Rescue excavations in Teghut started in 2010 in connection with revealing a regular stone masonry at the building site near the village school. As a result we unearthed six tombs of the 12th-11th centuries BC.

Tomb 4. The chamber ($1.25 \times 0.75 \times 0.6\text{m}$) was directed from north to south, its walls were made of regular granite stonework with traces of hewing.

The skull of the deceased was in the north-western part of the chamber with his face turned southwards. The deceased was laid writhed on the left side, with his elbows on his ankles, hands in front of the skull, a bronze bracelet on the wrist (Plate 3.3). The lip of the pitcher buried just under the skeleton in a 28cm deep pit looked out between the face and the arm on which the skull rested (Plates 3.4; 6.5). There was also a cup with a handle and wide opening (Plate 6.1).

Tomb 5. The walls were laid of regular granite stones. A large earthenware vessel was placed in a 0.30m deep pit 0.45m in diameter dug in the clay ground adjoining the northern wall (Plate 6.4) of the chamber ($0.93 \times 0.88 \times 0.7\text{m}$). There was also a single-handled cup with wide opening and vertical linear ornament on the body (Plate 6.2).

The deceased was laid writhed on the left side, his skull was in the bowl put on the dug in vessel. Three bracelets adorned the right arm, put under the skull.

Tomb 6. The chamber ($1.10 \times 0.77 \times 0.66\text{m}$) directed from north to south resembled the former by its composition. A 0.65 m wide filling of small stones was probably assigned as a dromos. Below the floor in the centre of the chamber there was a dug in single-handled pitcher and a single-handled cup (Plate 6.3, 6), and under the western wall there were two bowls and another single-handled cup.

The necropolis of Bardzryal dating from the 10th-9th centuries BC is located 2km west of Teghut village and about 0.4km west of the Bardzryal chapel. 86 tombs excavated there in 2012-2013 were badly damaged.

Tomb 24. The chamber ($1.40 \times 0.93 \times 0.85\text{m}$) directed from east to west was built of fractured andesite stones. As there were no traces of human burial this monument should presumably have some memorial assignment. A pitcher for wine was dug in the centre of the western part of the chamber (Plate 3.1, 2).

The facts revealed at the sites of Shnogh and Teghut come to confirm that the ritual of wine libation was identical in the tradition of many ancient Near Eastern⁴ or Indo-European peoples (Hittites, Greeks, Romans, etc.⁵).

Ancient Greeks conducted libation with unmixed wine, while wine for drinking was usually mixed with water. Libation in the memory of the deceased was made by dark wine and they used collared wine to extinguish the cremation pyre. Libation of wine during the funeral rite was described by Homer. Thus, while overseeing the fire

⁴ See, e.g. Hägg 1990: 177-184; Katz 2008: 167-188; Poo 1995.

⁵ Gamkrelidze and Ivanov 1984: 652; Tumanyan 2008: 18.

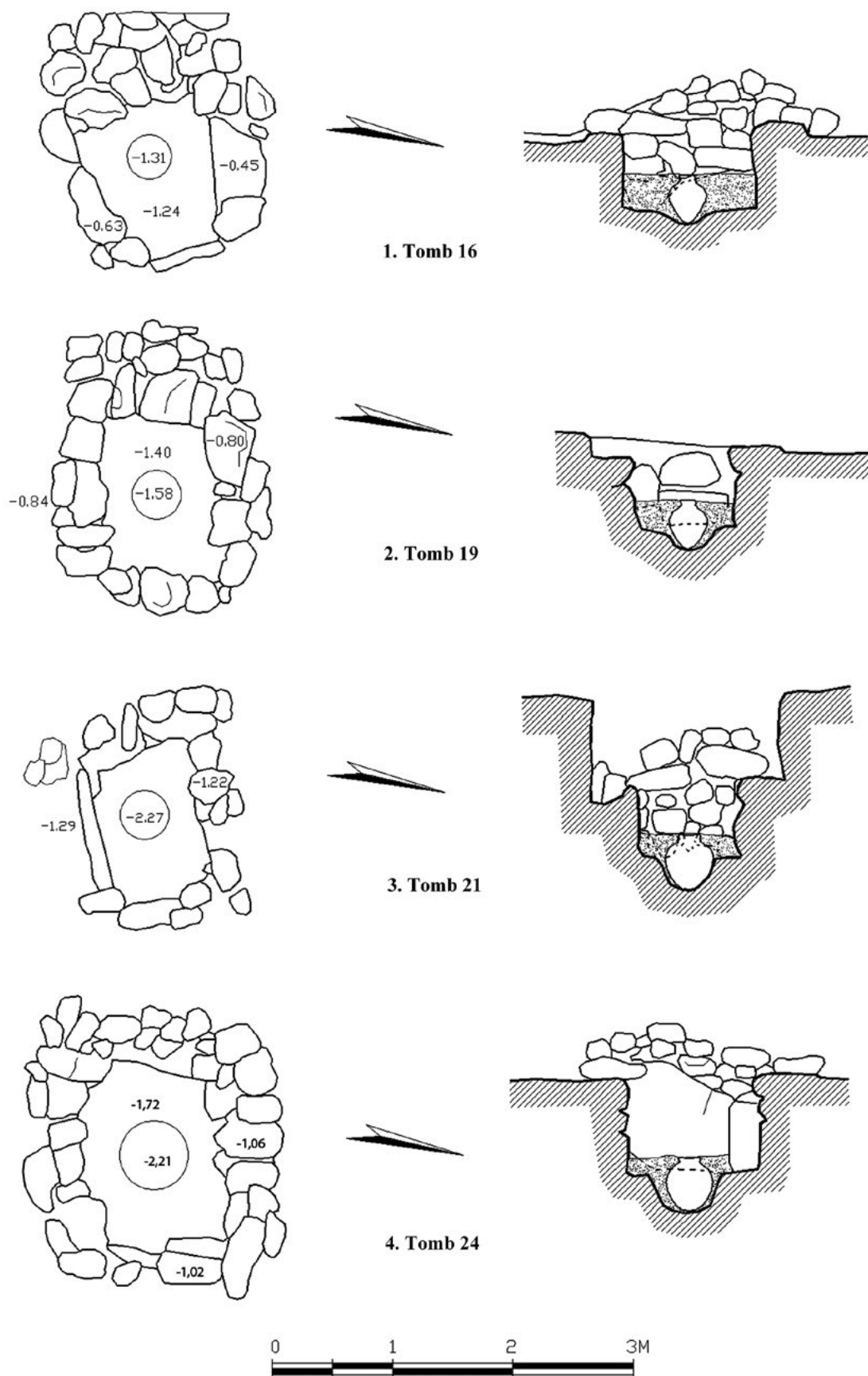


Plate 4

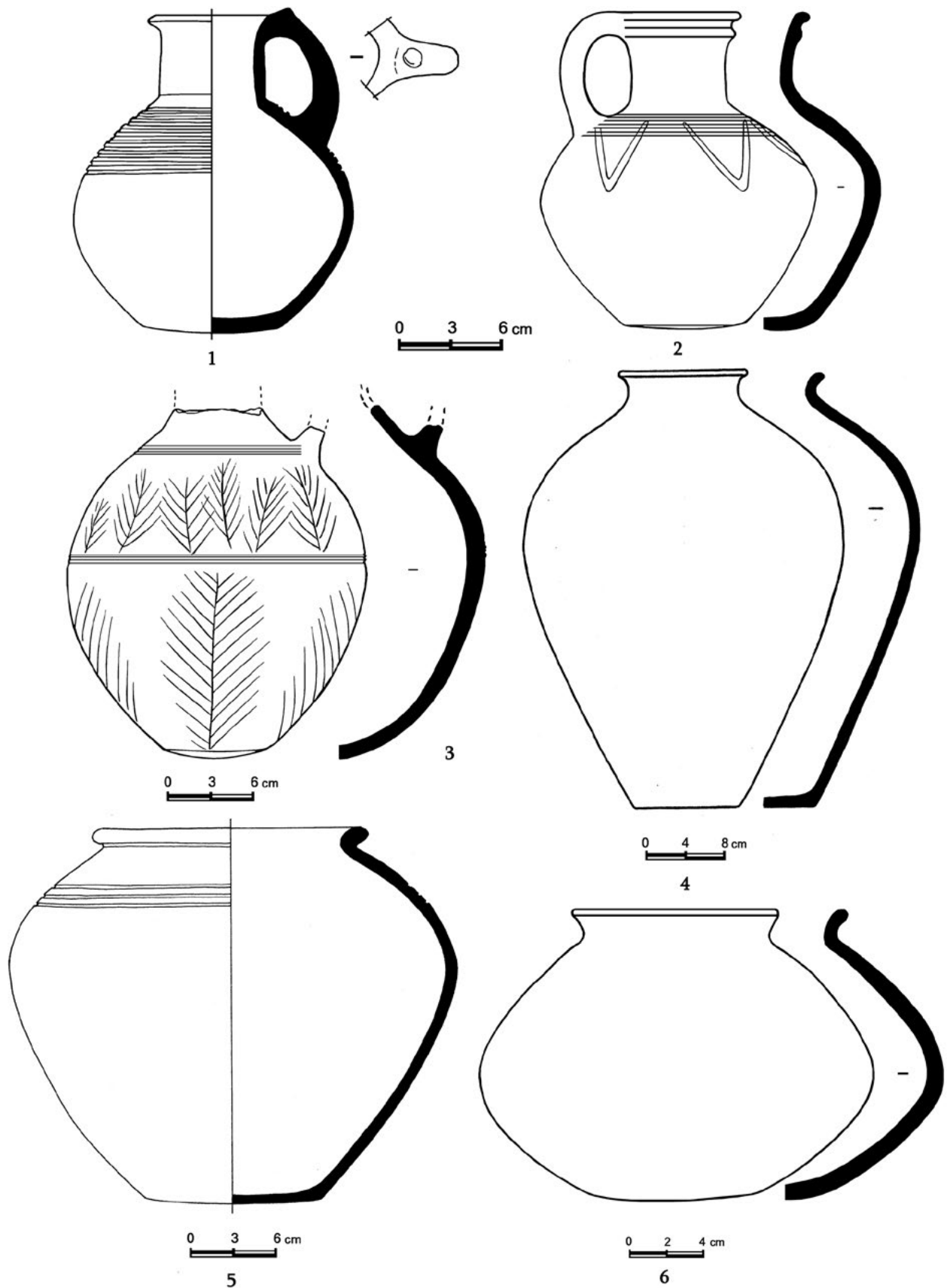


Plate 5

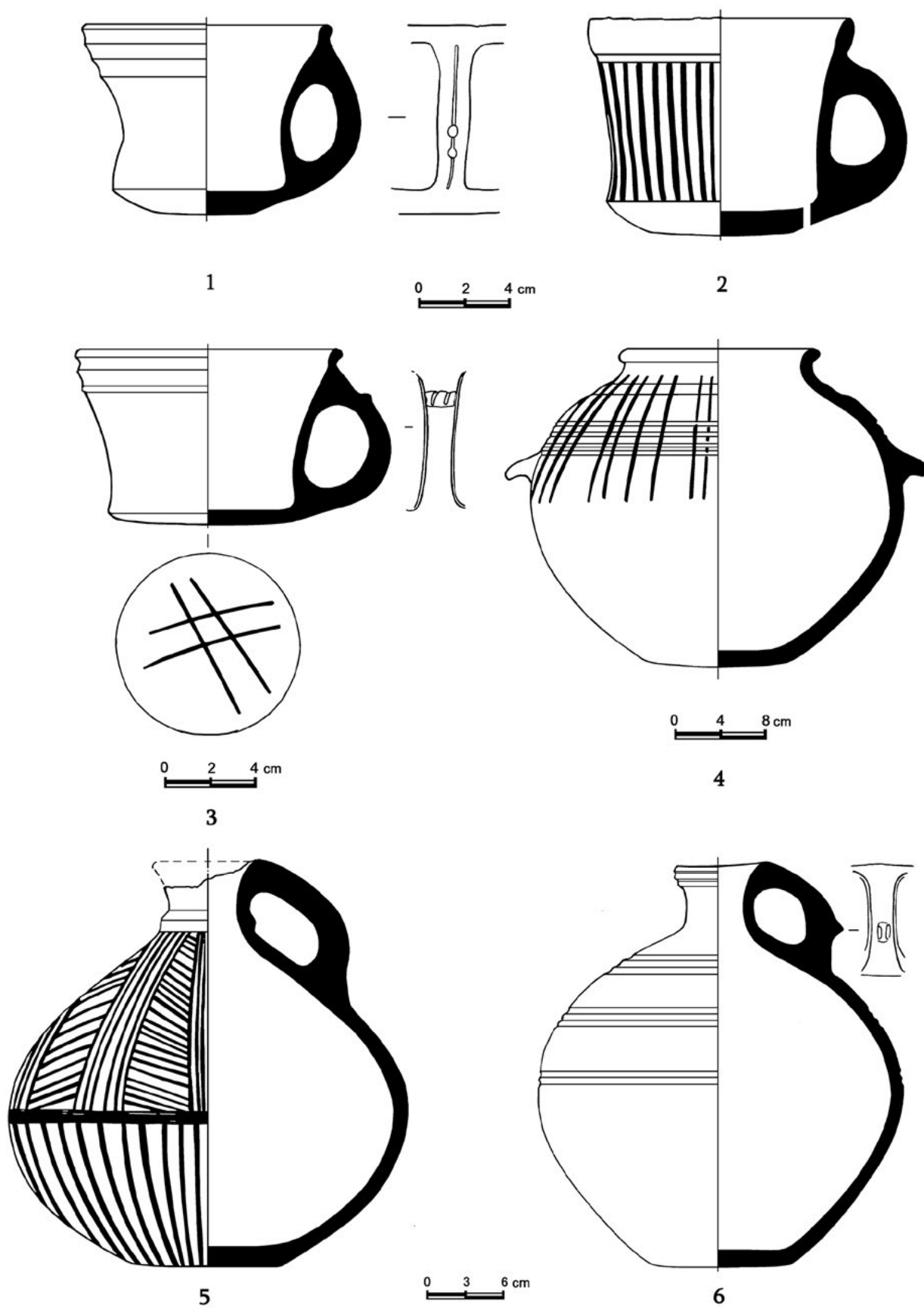


Plate 6

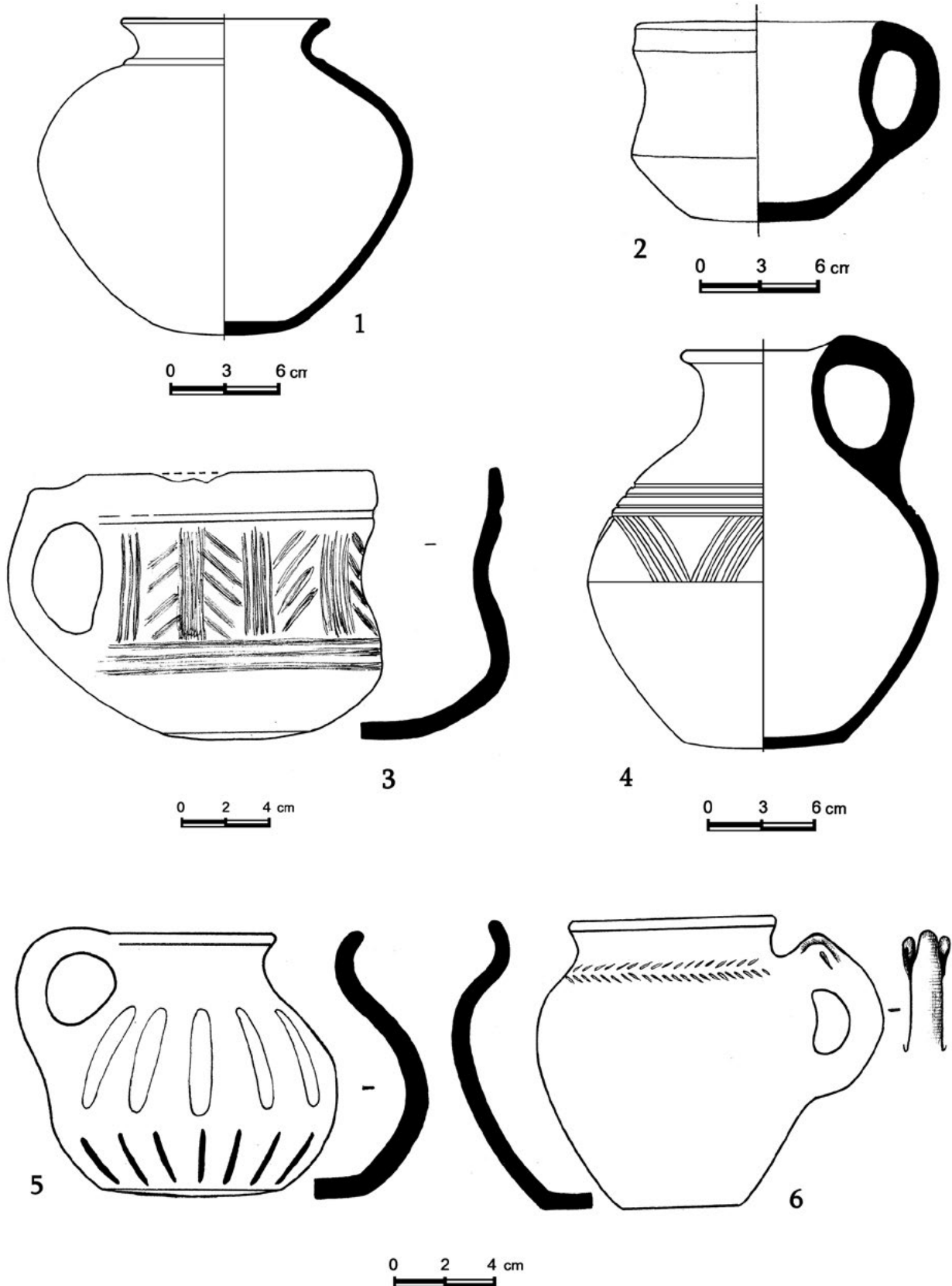


Plate 7

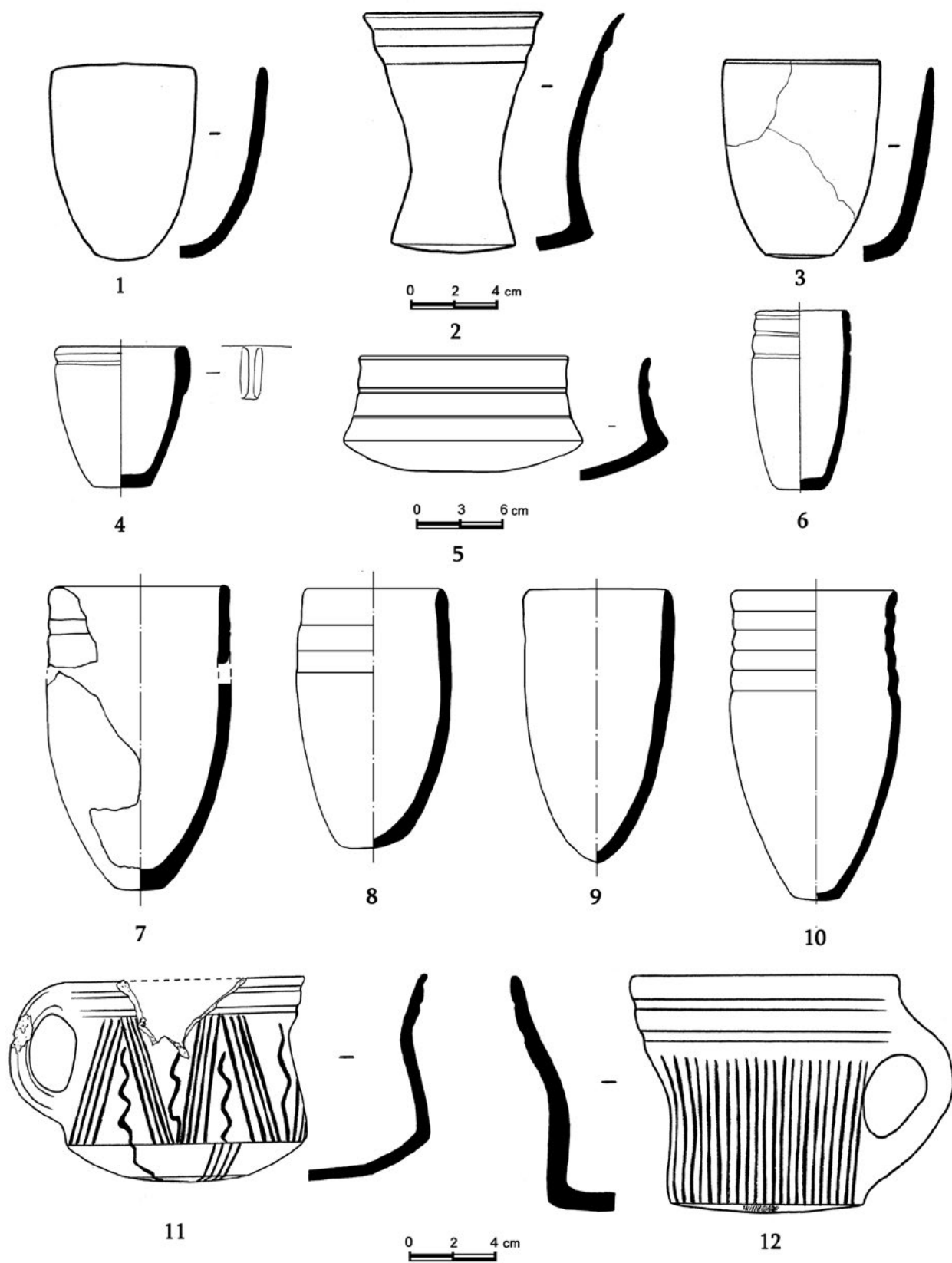


Plate 8

at the cremation of Patroclus Achilles was refilling his two-handled cup from a large golden bowl and pouring the dark wine on the earth until the morning.⁶

Libation of wine was ultimately pagan that is why our first bishops followed that tradition.⁷

In Armenia the women traditionally visit the grave on the next day after the funeral, called *aygotk'* or *aygalac'*, i.e. the 'mourning or lamenting of the women' when food and wine are served to the participants of the ceremony in the memory and as an offering to the soul of the deceased in expectation of his benevolence to the relatives.

Currently the Armenian Apostolic church considers that libation of wine – being a pagan rite is impermissible. Grigor of Tatev asked: '*What is it that while drinking wine they pour it on the grave for the deceased?*' adding that the property of the dead was buried with him pouring on him his portion of wine.

The fact that before offering raisins, bread, vodka or wine to the participants a bucket of water, probably instead of wine, was poured on the ground once the funeral was over and the grave was filled,⁸ might be explained by religious ban.

However these ancient traditions are still preserved. The only and most important change refers to the beverage to be poured. Traditional wine libation is mainly substituted by vodka, though wine is not altogether forgotten. At the end of the funeral the elderly men address to other participants with the word of consolation, make a sip from the glass and pour the remainder on the grave.

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⁶ Homer, *Iliad*, Book 23, l. 222-224.

⁷ Magsutyan 1945: 31.

⁸ T'ēodik 1926: 120-121.

Two Types of Nominal Compounds in Archaic Indo-European Anatolian Names and Words in the Old Assyrian Documents from Asia Minor (XX-XVIII c. BC)

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Abstract: In some new works it has been supposed that in the Old Assyrian texts there are forms of different Anatolian dialects. Continuing this trend of thought I suggest that to a separate dialects those Indo-European nominal compounds belong that had a thematic vowel *-o- /as a linking morph/. It as used after the first nominal stem and the second one. Thus at that period one might suppose that the Indo-European type of the personal names had been preserved in an Anatolian dialect that was in contact with the speech of Old Assyrian merchants.

Keywords: Anatolian dialects, Indo-Hittite, intermediate vowel *-o- (->-a-), linking morph, nominal compounds, Old Assyrian

For the work on the Early Bronze Age of the Ararat Plain the relations between different languages of the Northern part of the Transcaucasian area are particularly important.¹ Especially informative seem the results of comparing the early Indo-European (Indo-Hittite) languages - North-Eastern Anatolian (Hittite and Palaic) and South-Western Anatolian (Luwian-Lycian) that had separated at the beginning of the V mil.BC from the protolanguage of the other Indo-Hittite dialects (including Tocharian, Western Indo-European, Balto-Slavic, Albanian and PaleoBalkan-Phrygian, Thracian). The migration of the Pre-Greek population coming to Greece had led to the split of the Eastern Indo-European zone. For the earlier period it might be reconstructed as containing two parts: a Greek-Armenian dialectal zone with morphological (mainly verbal) isoglosses and shared lexical innovations and a large Indo-Iranian (Aryan) one that included all the (Eastern and Western) Iranian dialects, Nuristani, Mesopotamian Aryan (words and expressions close to Indo-Aryan borrowed into Mitannian Hurrian and Hittite), Dardic and Indo-Aryan. The Indo-Iranian part of this zone had changed the old subsystem of velar stops just as Armenian did shifting ancient palatal phonemes to the class of affricates becoming fricatives (the *satəm* isogloss); as from the point of view of topology of these velar phonemes Aryan and Armenian can be comparable, the same supposition of the trace of the former linguistic league can be suggested for several ancient lexical isoglosses of the type of Sanskrit *simha* 'lion': Arm. *inj* ինձ.² Later in this part of Eastern Indo-Hittite the row of the velars had been also transformed; a similar phonemic movement from labiovelars to plain labials or velars had been shared by Mesopotamian Aryan and the other Aryan dialects as well as by

postMycenean Greek (but the latter did not share the *satəm* isogloss). The old Indo-Hittite system of velar phonemes that had existed before these shifts had been partly preserved in Hittite and Palaic. The Anatolian dialects of Indo-Hittite in the 2nd millennium BC could be characterized by the following features, Table 1:³

The *satəm* isogloss is relevant for Mesopotamian Aryan (as later it becomes characteristic of Armenian). The *centum* variant is represented later in Tocharian, Western Indo-European and Greek. The *satəm* isogloss makes possible a hypothesis about the separate character of the Luwian part of Anatolian constituting initially an independent branch of the Indo-Hittite protolanguage. By the study of cultural borrowings discovered by S. Starostin (2007) a later contact with this dialect might be suggested for the Sino-Caucasian (North-Western Caucasian such as Abkhaz-Adygh, Kabardinian-Circassian, dead Ubykh) languages and some dialects connected to the same macrofamily (Hurro-Urartian, Hattic). To the languages that were in touch with Anatolian the other graphic languages used by the scribes of the civilized Western part of the ancient Eurasia such as Afro-Asiatic Akkadian and still non-classified Sumerian belong.

It becomes possible to follow the development of all these languages starting with the first half of the 3rd millennium BC; the recent discoveries of the bullae⁴ are important. The last successes in the investigation of Kanish/Kultepe archives have made it possible to find some important aspects of the structure of the names and terms introduced by the local Anatolian

³ Ivanov 2013.

⁴ See about the oldest data (concerning more than one thousand bullae brought from the Southern areas): Kulakoğlu 2010; Kulakoğlu *et al.* 2013; Kulakoğlu and Öztürk. 2015. The bullae (found at the stratigraphic levels X1 and at the earlier strata) have some Akkadian written signs, but no Anatolian words appear at these early artefacts brought from Mesopotamia.

¹ see the general survey of the problem in Diakonoff 1984/1968; Gamkrelidze and Ivanov 1984/1995; Ivanov 2001.

² Porzig 1954.

Table 1. Anatolian languages in II-I m. BC

Northern (Eastern)- type <i>centum</i> (* <i>k</i> '>* <i>k</i>)	Intermediary type	the <i>satəm</i> isogloss: Southern (Western) preserving the distinction of the palatal * <i>k</i> ' and * <i>k</i>	
Hittite: Of the time of New Empire / Middle Hittite / Old Hittite / = <i>Nes</i> -(of <i>Nesa</i> , Hit. <i>neš-um-ni-ili</i> -, <i>na/eš-ili</i> 'in the <i>Nesa</i> language') Palaic (Hit. <i>pala-um-ni-li</i> 'in Palaic')	Lydian	Luwian (Hit. <i>luw-ili</i> 'in Luwian')	cuneiform
			hieroglyphic
			Lycian (A) Milyan (B)
		Carian	
		Sidetic	
		Pisidian	

inhabitants of the city into the Old Assyrian language of their cuneiform legal documents of the period dated ca. 1927-1723 BC (the date deduced on the base of the lists of eponyms); they precede Old Hittite texts for ca. 250 years. At that time the two Anatolian groups of languages – a Northern (Eastern or Hittite including Palaic and partly Lydian) one and a Southern (Western or Luwian) complex – were already completely different from one another.⁵ According to dendrochronology that helps to make dates more exact the Old Assyrian colonies existed no less than 2 centuries earlier – in 22nd – 21st c. BC.⁶ No Anatolian documents from the preceding archeological levels III and IV have been discovered, but it appears that in the half-legendary stories of the earlier revolt of the native rulers against Assyrians at the time after Sargon's victorious march through Asia Minor some elements of the historical truth were present. Such ancient compound Indo-European names of the oldest cities as *Puruš-hand-a*⁷ that had existed at this early period testify for a possibility of tracing this Indo-European tradition much farther back into the prehistory of Asia Minor. The continuation of the excavations in Kanish that have brought more than 23,000 cuneiform tablets has made it possible not only to discover in them many Anatolian Indo-European names and loanwords (besides those identified much earlier by Balkan, Bilgiç, Laroche,

Götze, Milewski⁸ and other scholars⁸). J. G. Dercksen has succeeded in identifying a number of Old Assyrian texts relating mostly to native Anatolian persons with typical Indo-European names.⁹ In such texts several important Indo-European social terms and names of the gods have been found recently.¹⁰

In the last works among those enumerated here a new problem of the probable ancient Hittite dialects was formulated. Independently from the present author this question has been studied in the recent contribution by Alwin Kloekhorst.¹¹ Let us sum up a possible present-day approach to the problem.

In the last study of Alwin Kloekhorst it has been suggested that Anatolian *išpudaḥšu* = 'libate + child/king' < **spnd-ó-h₂emsu* contains an element -**ó-* that serves as an intermediary morph helping to bind together two stems of a compound. This is a usual way to form proper names in Indo-European. The brilliant Polish scholar Tadeusz Milewski in his review of Laroche's book on Anatolian names had discussed the possible original structure of a compound *Udn-i-aḥsu*.¹² It can be supposed that in the Old Assyrian documents of the 20th – 18th c. BC most native Anatolian proper names are nominal compounds. This is different from the usual type of onomastics of the Hittite period where there are but rare names like those of the kings *Šuppiluli-uma* formed from a compound 'pure' + 'pool' (with an old suffix of the origin -*uma*< -*um/wan*-). In the Old Assyrian period most of compounds serving as proper names are formed (as in the other ancient Indo-Hittite languages) with the unifying intermediate vowel *-*o-* (>-*a-*) used as a linking morph between the two nominal stems. An alternative meta-analysis would say that the first element in the final -*a*-<*-*o-*

⁵ They may continue two different Indo-European dialects; Ivanov 2001. Hittite and Luwian might have acquired many common Anatolian features due to a long coexistence in Asia Minor, thus the Anatolian languages are not a branch of the Indo-European, but a later linguistic zone or union (Sprachbund). According to another view accepted by most specialists all of these languages developed from Proto-Anatolian that was one dialect of Proto-Indo-European (Melchert 1994; Yakubovich 2010).

⁶ Newton and Kuniholm 2004.

⁷ Ivanov 2014. The second element of the name is identical to Hittite -*ḥanda* in the OHitt. *men-a-ḥanda* 'in front of' (an archaic compound), *ḥant*- 'forehead' (with a good IE etymology and correspondences in AfroAsiatic). The first part may be compared to the ancient ethnonym used also as a name of the *Prussian* Baltic Indo-European tribe, Ivanov 2014. A juxtaposition *mena-hand-a* is supposed by Kloekhorst 2008: 288-289; 577 (with further references). As in the Old Hittite texts (in the Anitta's inscription) the noun has the form of a stem in -**i-* *men-i*, it seems that the form *men-a-* is a case form (of Inanimate Nominative -Accusative Singular).

⁸ Cf. a survey Tischler 1995.

⁹ See a particularly impressive collection of some of such texts and fragments: Dercksen 2004: 156-174.

¹⁰ Dercksen 2004-2007; Gamkrelidze and Ivanov 2013; Ivanov 2001: 239; 2007; 2008a; 2008b; 2008c; 2013; 2014; Kryszat 2006.

¹¹ Kloekhorst 2014a; 2014b.

¹² Milewski 1969: 182-183.

that may be called thematic. In later Hittite there are but few compounds of the latter type: most of Hittite compounds are constructed by a juxtaposition of two nominal stems without any intermediary morph.¹³ One may suppose a loss of this structural feature in Hittite. There is a problem of a possible dialectal difference: the compounds with an intermediate *-*o-* might have belonged to another Anatolian dialect that is but rarely presented in the later texts. According to a possible alternative view, the Old Assyrian texts show an earlier type of the development of Hittite: then the old Indo-Hittite looks as a chronological stage, and not a dialectal variation. From this point of view it is necessary to pay attention to the correspondences in the Kanišite: As Kloekhorst remarks, 'some Kanišite onomastic elements resemble Hittite words: *-ḫšu* (m.) vs. *ḫšušar* (f) *ḫapi-a-ḫšušar* 'rich' *ḫapiḫšušar*.'

An attempt to explain the subtype of the Anatolian compounds (found in the Old Assyrian borrowings) with the intermediary interfix *-a-* as a reflex of the Proto-Indo-Hittite *-*o-* is made difficult by the combination with *-i-* in such stems as *ḫap-i-a-* (in later Anatolian a group of the type **-iya-* /*ḫapiya* should have arisen; the absence of the resonant **y* makes the explanation difficult.).

According to Alwin Kloekhorst the title *išpudaḫšu* = 'libate + child/king' < **spnd-ó-h₂emsu* – may belong to the Southern dialect of Hittite in the beginning of the 2nd millennium BC. In this Southern dialect of Hittite that had existed already in the very beginning of the 2nd millennium BC one may find a combination of the internal morphs including the intermediary element *-*o-* that was characteristic of an ancient archaic part of old compounds. A similar morph *-*a-<IE. *-o-* may be supposed in pairs of later Hittite and earlier Kanessite derived nouns studied by Alwin Kloekhorst.

The third element *-ḫšu* that occurs in personal names after the second unifying morph *-a-<*-o-* is related to a corresponding part of the city name (in the Moscow Pushkin museum Golenischeff's collection of the Old Assyrian texts) *ša-lá-aḫ-šu-a-* (Old Hittite *šall-a-ḫašš-uwa* <'Great+ King').¹⁴ From the two possible ways of interpreting the stem *ša-lá-* in *šall-a-ḫašš-uwa*, *šall-a-karta*¹⁵ it seems safer to choose a Caland system scheme¹⁶ and not the hypothetical stem *šall-ai-*. The Caland theory (*šall-a-* as a stem similar to thematic parts of the ancient compounds) may be supported by the etymological comparison of the Hittite *šall-a-karta* 'presumptuousness' and Tocharian A *mal-karta*.¹⁷ Thus it is possible to reconstruct Hittite and Luwian morphs

that were combined in the names serving as proper ones.

These morphs in proper names are cognate to Hittite *ḫaš-* 'to beget', *ḫašš-a ḫanzašš-a* 'a grandson and a great-grandson', *ḫaššu-* 'king', Hieroglyphic Luwian *has-ami-* 'born', *hasu* 'family', *hamsu-kala-* 'grandson', OInd. *asu-ra-* 'lord' (with a semantic development similar to that in Hittite, but not in Luwian), Germanic Runic *a[n] suR*, Old Norse *ass*, Old English *os* 'god'. It is possible to compare *ḫapi-a-ḫšu ḫapi-a-ḫšušar* 'rich' + *niwa-ḫšu niwa-ḫšušar* 'new' + *šupi-a-ḫšu šupi-a-ḫšušar* 'pure'.

Some Kanišite onomastic elements resemble Hittite words:

-ḫšu (m.) vs. *-ḫšušar* (f)
ḫapi-a-ḫšu
ḫapi-a-ḫšušar 'rich' +
niwaḫšu niwaḫšušar
šupiaḫšu šupiaḫšušar.

Compounds with the 3 last morphs *-a-ḫsu-sar* form women's names with the last morph **sor* 'woman' (preserved in Greek and also in Celtic and Indo-Iranian numerals), can be found also in Anatolian *hasu-sar-a-* 'queen', Proto Indo-European **sw-e-sor* 'sister' and a cognate feminine morph in Sanskrit and Celtic numerals '3' and '4'. According to Kloekhorst OAss. texts contain oldest IE language material, although its interpretation is difficult - e.g. *išpudaḫšu* = 'libate+ child/king' < **spnd-ó-h₂emsu*.

Išputaḫšu - points to a Southern dialect of Hittite - if South-Hitt. m *Išputaḫšu* = Kan. *išpudaḫšu*, then South-Hittite appears already distinct from North-Hittite around 1900 BC. This raises many new questions: TA vs. DA in *iš-pu-da-aḫ-šu* / *šu-pu-da-aḫ-šu* : /*spund-a-hsu*/ = /*spand-a-hsu*/ < PIE **spnd-* 'to libate' ? (Hitt. *išpānt-i* / *išpant-* 'libate').¹⁸

Particularly archaic are feminine names consisting of compounds with the last element *-niga-* related to the Old Hittite name of a 'sister' with Nostratic correspondences. Čop has suggested that it goes back to Indo-Uralic: he identified it with Hungarian *nő* and the other FinnoUgric-Samoyed names of a woman;¹⁹ a more exact correspondence might be found in Altaic **nek'V* > Tungus-Manchu **neku* 'a younger relative of the same generation (sister, brother)' > Negidal *nehun* 'a younger cousin, brother or sister, nephew, niece, a brother or sister of the husband and wife, a relative who is younger than the speaker' (with further correspondences in Uralic and Altaic, possibly also

¹³ Hoffner and Melchert 2008.

¹⁴ Ivanov 2001: 239.

¹⁵ Kloekhorst 2008: 708-709.

¹⁶ Beguš 2016.

¹⁷ Ivanov 2002.

¹⁸ Kloekhorst 2014b.

¹⁹ Čop 1979: 21; Ivanov 1990: 84.

Dravidian²⁰); cf. Anatolian *Saptama-niga-* ‘7th-sister (?)’. The disappearance of the ancient types of compound female names in *-sar* and *-niga* may have a social explanation, and not only a sociolinguistic one (a possible end of the use of the dialect represented in these names).

A probable change **n>l* may lead to a variant *-lka-/-lga-* in the native Anatolian (non-Hittite?) feminine personal names: *Šupi-elka* (Hittite *šuppi-* ‘pure’).

To the similar type of compounds belongs the native Anatolian *Ḫalki-ašu-* = Hittite ‘grain’+ ‘good’ (Hittite *aššu-* = Luwian *waššu-*) cf. Old Indian *su-* as a (first) part of a compound, Gk *év-*. In Hittite compounds the adjective is the last element: *pattar-palḫiṣ* ‘wing+ broad’. To this type of Caland system the compounds with the second element *-z/šipa-* ‘person’ belong; a mountain name *A-aš-ka-ši-pa* was formed in this way: this deified part of the landscape was described as one of the warrants among such important gods as Anatolian Kubaba in a recently found treaty of Kanish and Assur Kt.00/k6 Obv. 2.²¹ The initial function of the final *-a-* in the stem *ašk(-?)* depends on the general understanding of the whole compound.

Although in later Hitt. the suffix *-wa-* appeared mostly in combination with other derivational morphs (*-wa-r*, particularly in the forms of verbal nouns, etc.), still it may be reconstructed for an older period. It may be supposed in *A-ra-wa* ‘free (from taxes)’: Hitt. *arawa-* ‘free’. Lyc. *arawa-*; IE stem of the Lith. *arvas* ‘free’, Russ. *rovnyj*.²²

Texts with many native Anatolian names have been recently discussed by Dercksen (2004) who has found in them many traces of the specific institutions and habits of the non-Assyrian residents. As examples, for instance, the following tablets may be cited: (I) kt 88/k 1082 und 1087, Anat. names *Tù-pé-zi-al-kà* (a compound with a local variant *-lka-<*nika*, *Ki-kà-ar-<(āš)-na-aḫ-šu* (a type with the final *aḫ-šu*). (II) kt 89/k 383, Anat. names: *Šu-pu-da-aḫ-šu* (= *Šup-u-d*)-*a-ḫšu*, *A-šu-an*, *Ḫa-šu-ú-ma-an* (a suffix is fused with the Anat. stem *aḫ-šu*), *Na-ki-li-et* (the Hittite suffix *-a/et* added to a Hittite stem), *Ḫu-ma-da-šu* (a Luwoid loss of a nasal in a word with Hittite etymology different from the Luwian synonym),

Ḫa-al-gi-a-šu (a compound in which the initial *-a-* of the second element might have been understood as a linking morph). To the same type the ancient Anat. name *Upati-a-ḫšu-* (originally ‘born with a land-estate’=‘noble’) belongs. It was Luwian as also a similar male name *Ḫa-ba-LÚ-iš* (= *Uba-zitiš* ‘man of the grant’). The stems are represented in *upattinum* ‘royal land grant,’ Hitt. *ubadi-* (n.) < Luv. *upatit-* ‘royal land grant’ < *upa-* ‘to furnish, to grant.’²³

According to Dercksen (2007: 35), this word is derived from the Hittite *i*-stem *ubadi-* (n.) which comes from Hieroglyphic Luw. *upatit-* ‘royal land grant.’²⁴ The stem goes back to PIE as can be proved by a comparison to TB *wepe* ‘corral, paddock, enclosed area’ (for cattle=Buddhist Hybrid Sanskrit *go-cara*) < **webh-*,²⁵ cf. IE **[H]we-bh-/dh-* ‘to weave’, metaphoric use ‘richness, success’, OE *ead*.²⁶

To understand the oldest terminology of the estate allotments or gifts it is necessary to compare at least two of them. Old Assyrian *ubadinnum* ‘land allotment’ should be compared to the term *tuzinnum*. The most ancient documentary evidence on the IE feudal organization is contained in the Old Assyrian *tuzinnum*, Hitt. *tuzzi* and IE **teut-*. As J. G. Dercksen has shown on the base of the recently discovered native texts the Old Assyrian word *tuzinnum* denoted ‘army’ and also referred to a type of a field belonging to a house tied to a special service obligation of a military character, cf. the expression ‘*tuzinnum* of the bow’ referring perhaps to archers and to the provision of archers by the tenants of the fields of this kind.

It may be supposed that in the cognate Western IE terms (in Osc. *touto*, Umb. *tutas* ‘civitas’, *totam* ‘civitem’, W *tud* ‘people, country’, OIr. *tuath* ‘tribe, people’, Goth. *þiuda* ‘people’, OPrus. *tauto* ‘country’, OLith. *tautà*, Lithuanian *taūta* ‘people’, Old High German *diota*) there is a trace of the West IE and Bt-Sl. name of ‘community, people, land’: IE **teu-t-*; as the king of Kanish appears in a rite connected to *tuzinnum*, one may think also about the connection to Goth. *þiudans* ‘king’: *þiuda* ‘people’.

The idea of an estate or an agricultural field that had been connected to the military service was generalized becoming a notion of the ‘whole’ (Lat. *totus*) community as opposed to the neighbors and enemies (as seen in the related Sl. term for ‘the other /foreign people- **cjužu*,

²⁰ The word (cognate to Luwian *niya-*) has correspondences in the other Nostratic languages (see on the Altaic kinship term **nek* Starostin et al. 2003: 968; Dravidian matches are added in Starostins’ Website <starlin@rinet.ru>; a Uralic one was suggested by Čop) and belongs to the oldest type of the Indo-European kinship terms, cf. Ivanov 2001: 45. The compounds of this ancient type are not present in the later texts of the historical Hittite period. Here the data of Nostratic comparison to the ‘closest relatives of Indo-European’ (to borrow a term of J. Greenberg) may be useful for the history of Hittite and other Anatolian languages.

²¹ Günbatti 2004: 250, 254, 265 (a photography).

²² Toporov 1975.

²³ Kloekhorst 2008: 923; Melchert 1993: 243.

²⁴ Cf. Kloekhorst 2008: 923; Melchert 2004: 371; 1993: 243; Yakubovich 2005. For the Capp. word, see Alp (1997: 42) and Dercksen (2004a: 151, 160). Note the writing *ú-pá-ti/ti-im* without suffix in Kt v/k 152:15. 20. Cap. PN *Upati-aḫšu* may be related. According to Starke (1990: 198) other borrowings are OAss. *ubadinnum*, Ugar. *ubdy* ‘territory’.

²⁵ Adams 1999.

²⁶ Gamkrelidze and Ivanov 1984/1995, II: 583; Pokorný 1959: 76.

also as a designation of the Finnish-speaking neighbors Čjudi as studied by Bubrikh).

Old Assyrian *ubadinnum* 'land allotment' that in the documents composed by natives denoted the land grant of the king of Kanish to the high functionaries had been borrowed from Luw. *ub-ati-t* 'land-grant'; although the form *ubadi* occurs twice and helps to conform the independence of the suffix *-nu-* in this noun, still the usual variant is that with this final morph: *ubadinnum*. In Luwian the word was formed from the verb *upa-* 'to grant, to give a gift' (according to Melchert: cf. on a suggested alternative meaning 'to found'²⁷) = Lyc. *ube-* 'to dedicate, to offer', Lyc. *uba* 'grant, offering', the word is common in Southern Anat: see also Carian *ybt* (the original meaning 'donation'²⁸) = Luw. *upati-t-* 'land grant, state' (< 'gift'). In Hittite the stem might have been borrowed from Southern Anatolian. Palmer's old reconstruction of the IE feudal system based on Mycenaean data seems to be proved by these new discoveries. A new interpretation of the whole Indo-European socio-economic and military structure may be reinterpreted due to these etymologies. The Anatolian term designating a person who is free of taxes (Old Assyrian name *Arawa* = Hittite *arawa-* 'free from taxes' with an exact Lycian correspondence, cf. Lith. *arvas* 'free' and cognate Balto-Slavic terms) refers to neutralization of the semantic opposition of those who can bear weapons and may receive a portion of land. To discover a preceding system of services and obligations that existed at the early period of the development of the Anatolian society it is important to define a relation of the Old Assyrian terms *tuzinnum* and *ubadinnum*. Both the words are borrowed from the Indo-European dialects of the Anatolian zone, but according to the phonetic change (palatalization **-t- > -z-* before *-i*) the first one had belonged originally to Hittite (Northern Anatolian) while the second one was Luwian.

It may be supposed that these early borrowings from Anatolian to Old Assyrian can help to reconstruct the old system of feudal services inherited from the PIE times and important for the reconstruction of the oldest social system of the Indo-Europeans.

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²⁷ Yakubovich 2010, 5.3.

²⁸ Adiego 2007: 347, 492.

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New Insight into the Agglomerated Houses/Agglomerated cells in Armenia: Arteni, Aragats Massif

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In tribute to Professor G. Areshian who, in the 1970s, introduced a French student to the rich archaeological heritage of Armenia.

Abstract: Enigmatic stone structures, termed wheel houses/jellyfishes or agglomerated houses, were discovered in past decades in the Near East and quite recently in Armenia, in the same areas as the kites (traps made of two long walls converging into an enclosure). The intent of this article is to provide new insight into the agglomerated houses in Armenia and to deepen our understanding of the chronological and spatial aspects of these structures. We will present a brief overview of our knowledge concerning these massive stone features (kites, wheel houses/jellyfishes, agglomerated houses), first in the Middle East and then in Armenia. Finally, we will examine the results of the first season's excavation of agglomerated cells near Arteni.

Keywords: Chalcolithic, Bronze Age, Trialeti-Vanadzor culture, Arteni, stone structure, kite, wheel/agglomerated house, agglomerated cells

Kites, Wheel Houses/Jellyfishes, Agglomerated Houses in the Near East

Kites (also termed *Desert kites*) were discovered almost a century ago, but the scientific interest in these structures has undergone a significant rise over the past decade. In the 1920s, during their postal flights between Baghdad and Cairo, British RAF pilots first noticed thousands of enigmatic stone-built structures. They were called by the Bedouins: *'the works of the old men.'*¹ They had been ignored until this aerial reconnaissance, because they were most of the time not visible at ground level. Among these stone features, the most distinctive are the kites, but others are also common: the *wheel houses/jellyfishes* and the *agglomerated houses*.

Aerial reconnaissance took place again in the 1990s, initiated by Kennedy who proceeded to carry out an annual program of flight over Jordan and Saudi Arabia.² Recently the study of these huge stone structures took a new step forward with the development of satellite imagery (Google Earth, Bing Maps). These free high-resolution images online enabled systematic research.³ However, although the localization and mapping of these structures rely primarily on satellite images,

field surveys remain necessary in order to properly understand their function.

Desert kites

Kites are (Figure 1) the best known among these massive stone structures, having been intensively studied by several teams around the world. The airmen coined the term '*Kites*' due to their shape similarity to the child toy as seen from the air.⁴ The Arabic name, in singular '*masyada*,' means hunting trap or net.⁵ Later, because they were seen most frequently in the more barren regions of the Middle East, Kirkbride (1946) added the descriptor '*desert*', and it is as '*desert kites*' that these enigmatic forms have become well known in the academic literature.⁶

Kites are composed of two long converging antennas leading to an enclosure of circular, oval, sub-rectangular or irregular shape. The enclosure diameter ranges from c. 10 to 100m. The antennas measure from hundreds of meters to several kilometres. The enclosures vary in shape: circle, star, arrow, axe, etc. Several small circular cells are set out around them. The walls are composed of one row or two parallel rows of local stones and their height varies between ca. 0.60 to 1m.

¹ Athanassas *et al.* 2015: 1; Kennedy 2012a: 77.

² Kennedy 2012b. The APAAME (Aerial Photographic Archive for Archaeology in the Middle East) Project proposes online (<http://www.apaame.org>) large quantities of aerial photographs taken during the aerial reconnaissance programmes.

³ Barge *et al.* 2013; Kempe and Al-Malabeh 2013.

⁴ Maitland 1927; Rees 1929.

⁵ Hellms and Betts 1987: 45; Kennedy and Bewley 2009: 75.

⁶ Kirkbride 1946.



Figure 1. Desert kite at Safawi, Jordan
(Source: APAAME_20090928_DLK-0058.dng)

First acknowledged in the northern Arabian Desert, *kites* have since been identified over a vast area, in Syria,⁷ Jordan,⁸ Sinai and Negev,⁹ Saudi Arabia,¹⁰ Armenia,¹¹ Kazakhstan and Uzbekistan¹². A meticulous inventory has been managed by the Globalkites Project (www.globalkites.fr); in January 2016, the listed *kites* numbered more than 5000.¹³

On the landscape, *kites* are either isolated (Negev,¹⁴ Palmyra steppe¹⁵) or set together in cluster to form

long chains (Jordan).¹⁶ The relationships between *kites* and the contemporary campsites or villages still remain to be determined. Their dates remain unclear too, because for most of them, no cultural material is available. However in each region, some *kites* have been more precisely dated than others. In Jordan and Syria, some of these structures could be Neolithic (9th to 6th millennia BC).¹⁷ However, the rare clues at disposal seem to sustain the hypothesis that in most areas (Syria,¹⁸ Negev,¹⁹ Sinai,²⁰ Armenia²¹) *kites* are a Chalcolithic-Bronze Age – Iron Age phenomenon (4th-1st millennia BC).

The actual function of the *kites* is still difficult to assess. The hunting purpose seems to be the most convincing and this solution is generally favoured by scholars.²²

⁷ Échallier and Braemer 1995.

⁸ Betts and Burke 2015: 76; Kempe and Al-Malabeh 2013.

⁹ Bar-Oz *et al.* 2011; Holzer *et al.* 2010.

¹⁰ Kennedy 2012a.; Kennedy *et al.* 2015: 177.

¹¹ These structures were evidenced some years ago by Karakhanyan (Institute of Geological Sciences, NAS RA) on the south-western flank of the Aragats massif (Trifonov and Karakhanyan 2004) and then studied by Barge *et al.* (2016b).

¹² Barge *et al.* 2016a.

¹³ www.globalkites.fr (retrieved January 2016): Syria: 2120, Jordan: 1166, Saudi Arabia: 740, Kazakhstan: 472, Turkey: 206, Armenia: 186, Uzbekistan: 51, Iraq: 22, Israel: 20, Yemen: 15, Egypt: 5, Lebanon: 3.

¹⁴ Nadel *et al.* 2010: 977.

¹⁵ Morandi Bonacossi 2014.

¹⁶ Betts and Burke 2015: 76; Wilkinson 2003: 175.

¹⁷ Betts and Burke 2015: 75; Morandi Bonacossi 2014: 37-38.

¹⁸ Van Berg *et al.* 2004: 97; Zeder *et al.* 2013.

¹⁹ Bar-Oz *et al.* 2011.

²⁰ Holzer *et al.* 2010: 812-813.

²¹ Brochier *et al.* 2014: 43, 48.

²² Bar-Oz *et al.* 2011: 213; Betts and Burke 2015: 86; Barge *et al.* 2015: 4; Crassard *et al.* 2015; Chahoud *et al.* 2016: 149; Rosen and Perevolotsky



Figure 2. Jellyfishes/wheel houses: a) Safawi, Jordan
(Source: APAAME_20090928_RHB-0102.dng);

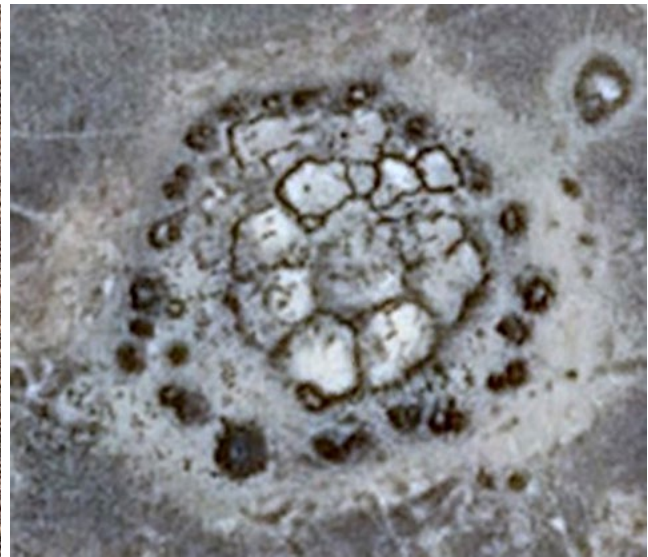


Figure 2. b) Syria
(Google Earth, 32°56'57.79"N/36°59'5.27"E).

The purpose of the long antennas would be to funnel wild animals towards the enclosure. In the absence of specific archaeozoological data, the exact species of the hunted animals remains unsolved:²³ wild ungulates such as Persian gazelle (*Gazella Subgutturosa*) or Dorcas gazelle (*Gazella Dorcas*), Onager (*Equus Hemionus*), Arabian oryx (*Oryx Leucoryx*). Some ethnographic parallels sustain the hypothesis of animal traps.²⁴ As Betts and Burke rightly point out 'The effectiveness of a trap depends on its adaptation to the habits of the specific animal for which it is designed.'²⁵ This adaptation to a specific species could explain the variability of kite shapes.

An alternative function for the kites has been proposed by Échallier and Braemer.²⁶ They consider that these structures could have had a pastoral use and served for husbandry of semi-domesticated animals or for the herding of domesticated animals. Chahoud *et al.* have pointed out the fact that some of the Armenian kites without antenna could have been used for animal husbandry.²⁷

Wheel Houses / Jellyfishes

Unlike kites, jellyfishes have not been the subject of intense study until now; their dispersion, function and dating remain poorly known.

In the 1920s they were referred to as 'stone circles' or 'rose-shaped enclosures'.²⁸ In the 1980s, archaeologists working in Jordan, in the Harrat al-Shaam region, termed them *jellyfishes* or *wheel houses*, because of the shape of their contour (Figures 2a, 2b).²⁹ Indeed, from above, they look like medusas or cartwheels. Kennedy describes them as follow: 'In their most perfect form Wheels have a central hub, several radiating spokes, and an encircling rim. Some have an additional ring of small Cairns outside the rim; and some have Cairns between the spokes, other are more amorphous shapes.'³⁰ However most of them are far from this canonical model and show variation in the general shape of their contour or in their internal organisation.

The diameter of the *wheel houses/jellyfishes* varies from c. 20 to 80m. In Jordan, where these features are the best known, Kempe and al-Malabeh³¹ determined that 'On average, wheel houses measure 51.1 × 42.8m in diameter (...) with an average area of 1,730m²' and state clearly that the stone bases of the walls were 0,5 to 1m high.³² The absence of collapsed stones suggested that the superstructure, if any, was not built of stone. The question of the superstructure remains a mystery; earthen architecture (mud-bricks, cob) could have been used. However Kempe and al-Malabeh suggest that 'the perimeter (and some of the radii) may have been reinforced by wood, branches or thorny bushes, similar to what is still seen today in modern corrals.'³³ In fact, the type

1998: 110; Zeder *et al.* 2013.

²³ Gazelle (Betts and Burke 2015; Nadel *et al.* 2010; Zeder *et al.* 2013) or onager (Zeder *et al.* 2013).

²⁴ Crassard *et al.* 2015: 2096-2097, Figure 3; Morandi Bonacossi 2014: 34, 38; Nadel *et al.* 2010: 977.

²⁵ Betts and Burke 2015: 76.

²⁶ Échallier and Braemer 1995: 57-58.

²⁷ Chahoud *et al.* 2016: 149.

²⁸ Kennedy 2012b: 79.

²⁹ *Jellyfishes* (Betts 1982a: 30-31; Helms 1981: Plate 9); *Wheel Houses* (Riley 1982).

³⁰ Kennedy 2011: 3189, Figures 7-8.

³¹ Kempe and al-Malabeh 2010b: 56-58.

³² Kempe and al-Malabeh 2010a: 209, Figure 9; 2010b: 56-58.

³³ Kempe and al-Malabeh 2010b: 56-58.



Figure 3. Wheel overlying the tail of Kite 32, Azraq, Jordan
(Source: APAAME_19970527_DLK-0153)

of superstructure that we can reconstruct is intimately linked with the function that we attribute to the structure.

For now, the original functions of these features can only be guessed. Two hypotheses are generally proposed. Some authors considered them as prehistoric settlements.³⁴ The size and layout of the *wheel houses/jellyfishes* suggest that they could have accommodated one extended family or even several families. It is also conceivable that some of the cells would have been used for animal herding.³⁵ Others considered that they have funerary or ritual/religious purposes.³⁶ This second hypothesis relies on the fact that some sepulchral cairns have been discovered next to the *wheel houses*.

The study of the relationship between *kites* and *wheel houses/jellyfishes* shows that the latter often overlie *kites*, but never the other way around (Figure 3).³⁷ Kennedy sustains the idea that some *jellyfishes* ‘seem deliberately located in or on the head of kites as if symbolically decommissioning them’.³⁸ Except for this posterior relationship of *wheel houses/jellyfishes* to *kites*, the date of use of these structures remains mysterious.

Over a thousand of these structures have been located in the region of the Harret al-Shaam, between, Syria, Jordan, and Saudi Arabia;³⁹ nonetheless, they are obviously far outnumbered by the *kites*. The spatial distribution of the *wheel houses/jellyfishes* finds some parallels with the *kites*: some are organized in clusters, other stand as isolated structures. In Jordan, Betts,

³⁴ Betts 1982a: 31; Kempe and al-Malabeh 2010b; 2013, Wilkinson 2003.

³⁵ Kempe and al-Malabeh 2010b: 56-58.

³⁶ Kennedy 2011: 3189, Figure 9.

³⁷ Kempe and al-Malabeh 2010a: 209, Figure 7 (kite 3); Kennedy 2012b: 80, Figure 4.

³⁸ Kennedy 2011: 3195.

³⁹ Kennedy 2012b.



Figure 4. Agglomerated houses, Azraq group B, Jordan
(Source: APAAME_20080925_DDB-0254.dng).

Kempe and al-Malabeh, underline the fact that these structures are usually set on tops of the lava rises.⁴⁰

Agglomerated houses

Another type of stone features, located in Jordan and Saudi Arabia, is described by Kempe and al-Malabeh as ‘quasi-circular structures formed by an agglomerate of ‘rooms’ attached to each other. Therefore, the outer perimeters of these Agglomerated Houses are irregular’.⁴¹ From above, this spatial pattern looks like bubbles (Figure 4). The rooms or cells can be laid out in a round or oval shape or arranged in a more elongated manner.

This type is less known and apparently far less widespread than *kites* and *wheel houses/jellyfishes*. The *agglomerated houses* seem also to be younger than *kites*, since some of them are built on *kites*.⁴²

Kites, Jellyfishes and Agglomerated cells in Armenia

Aragatsotn region

Kites and *agglomerated cells*⁴³ type structures in Armenia have been first seen during geological investigations carried out by Karakhanyan in 1993 and 2009.⁴⁴ In April 2011, a systematic study of the *kites* of the Aragats massif, through satellite image analysis and surveys, was launched under the International Associated Laboratory (LIA) ‘HEMHA’ (*Humans and Environment in*

Mountainous Habitats, the case of Armenia), directed by Avetisyan (Institute of Archaeology and Ethnography, NAS RA) and Karakhanyan (Institute of Geological Sciences, NAS RA) for the Armenian part of the project, Lombard and Chataigner (UMR 5133 Archéorient, Lyon) for the French part. Then a project granted by the CNRS was launched (ANR ‘GlobalKites’, directed by Crassard, UMR 5133 Archéorient), in order to compare the Armenian *kites* with those from South-western Asia (Jordan, Syria, Saudi Arabia) and Central Asia (Kazakhstan, Uzbekistan).

During the Kite survey in 2011, *agglomerated cells* (JF1: 40°19’10.69’N/043°46’59.09’E; alt=1243m) were found 3300m north-west of Arteni village (Aragatsotn marz), on the left side of the road leading to Talin, not far from Kite no.7 (40°19’26.32’N/043°47’54.21’E; alt=1274m; Figure 5a). Material (obsidian flakes, pottery shards and fragmented bones), was spread on the surface inside the cells, sometimes forming concentrations. Outside the complex, almost no material could be found.

During the 2012 survey, a similar structure was found in the vicinity, at Karakert,⁴⁵ where Kite no. 94 cuts through the *agglomerated cells* (JF2: 40°13’27.34’N/43°48’52.57’E; alt. 1080m; Figures 5b, 5c). This latter pre-dates the *kite*, in contrast to the situation observed in Jordan. As in Arteni, the cells’ floors are covered with material, lithics (obsidian, dacite and flint artifacts), bone and pottery shards. Traces of fire places and some entrances are clearly visible. During the same season, a very small scale trench was dug, but except for the surface material, almost nothing was found.

On satellite images several dozens of *such complexes* were discovered on the Aragats massif (south western flank) by the team of the *GlobalKites* project and six (J23,

⁴⁰ Betts 1982b; Kempe and al-Malabeh 2010a: 209; 2010b: 56-58.

⁴¹ Kempe and al-Malabeh 2010b: 56-58.

⁴² Kempe and al-Malabeh 2010a: 209.

⁴³ These structures have been called ‘Jellyfish’, until now. However, the shape of their contour does not fit the jellyfish type. So we think that these structures match better the Agglomerated House type from the Middle East. However, the exact function of these structures remains unknown; therefore we prefer to call them ‘Agglomerated cells’ rather than Agglomerated houses.

⁴⁴ Trifonov and Karakhanyan 2004: 317

⁴⁵ Brochier et al. 2014 : 42, Figure 17.

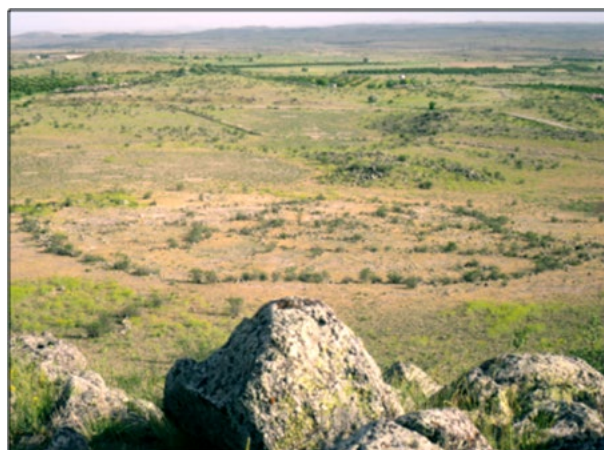


Figure 5a. Agglomerated cells in Armenia: a) Artēni ('JF1');



Figure 5c. Karakert ('JF2');



Figure 5b. Karakert ('JF2' and kite No.94) (Photo O. Barge);



Figure 5d. Dalarik.

J24, J25, J26a, J26b, J27) of these *agglomerated cells* were fixed in 2013 during the Kite survey program.

In 2014, the Institute of Archaeology and Ethnography NAS RA (Kalantaryan, Azatyan) carried out a small survey and discovered the remains of other *agglomerated cells* (40°13'09.47"N/ 43°54'10.75"E) not far from Dalarik village (Armavir marz), close to Kite no.38 (Figure 5d). The preliminary observation of the surface materials suggests an early date of occupation (Chalcolithic period).

On the south-eastern flank of the Aragats massif, in the Aragatsotn and Armavir marz, an Armenian-Israeli joint project (Institute of Archaeology and Ethnography NAS

RA, Haifa University) discovered *kites* and *agglomerated cells* near the Lernamerdz and Aghavnatun villages.⁴⁶

Located at the foot of a hill range, two '*agglomerated cells*' were discovered, precisely at the junction between the Ararat plain and the hills. Their southern parts were badly preserved because of modern activities, but on their northern sides the walls were nearly 1m high and even higher. The archaeological surface material consisted mainly of pottery shards dating to the Trialeti-Vanadzor culture (Middle Bronze Age II). In one of the '*agglomerated cells*', small scale excavations have revealed a pit and three floors made of clay. The cultural layer contained a large quantity of charcoal, ceramic shards, animal bones and obsidian artefacts, in particular very well made arrowheads.

⁴⁶ Nadel *et al.* 2015: 122.

The stratigraphy of this Trialeti-Vanadzor culture (MB II) complex is very interesting, as is its shape, which is similar to the *agglomerated cells*. Not very far from the settlement there are some more structures which, according to the opinion of the researchers, may have religious function.⁴⁷

Such an occupation of the Trialeti-Vanadzor culture is extremely interesting, because in most of the central regions of South Caucasus (especially in Armenia and Georgia), this period is known only through graves. The widespread abandonment of many settlements of the Kura-Araxes culture (Early Bronze Age) during the second half of the 3rd millennium BC⁴⁸ is a phenomenon that has not yet been explained; no major event, either environmental (climate change) or socioeconomic, could be highlighted.

Vardenis region

In the Vardenis region south-east of Lake Sevan, at altitudes over 2000 m, several settlements (Geghaqar, Aghbradzor, Karkar, etc.) surveyed by Karakhanyan have yielded stone complexes with a radial-meshed geometry, resembling *agglomerated cells*.

In 2004-2005 and 2012, Badalyan and Harutyunyan (Institute of Archaeology and Ethnography, NAS RA) carried out test excavations at the Geghaqar site (40°07'12.26"N/45°39'18.10"E; alt=2220m) situated 2,5km west-north-west of Geghaqar village and 3,2km east of Makeniz village (Gegharkunik marz). The settlement occupies nearly 6-7ha, close to an early Holocene lava flow (Figure 6a). Two types of structures could be distinguished: rectangular buildings with large walls, composed of two rows of rough stones with backfilling, and larger irregular buildings, composed by vertically placed boulders. The finds include pottery shards and obsidian flakes. Some painted and incised pottery shards are characteristic of the Middle Bronze Age (19th-17th century BC), a period confirmed by radiocarbon dating of charcoal samples.⁴⁹ Another part of the material is later (Iron Age, Middle Ages) and suggests several phases of occupation of the site.

In the Aghbradzor settlement (alt. 2300m), 2.5km SSW of the Geghaqar settlement, two types of stone buildings are present: rectangular multi-section half-dugouts and larger complexes with irregularly rounded forms, that could be considered as '*agglomerated cells*' (Figure 6b). The small scale archaeological investigations carried out in 2014 by Badalyan and Harutyunyan have shown that the settlement had been occupied during the

Middle Bronze Age (characteristic pottery), but the dating of stone buildings is uncertain.⁵⁰

Although at Geghaqar and Aghbradzor the main elements of the sites – stone buildings – require accurate dating, the presence of two neighbouring Middle Bronze age settlements at the altitude of 2200-2300 meters a.s.l. is extremely important. Further archaeological research will attempt to define the nature (permanent or seasonal) of these Middle Bronze settlements.

Excavations of the Agglomerated cells at Arteni (Armenia)

In order to better understand the function of the *agglomerated cells* on the Aragats foothills and their chronological-cultural placement, in June 2015 we undertook a first season of excavations at the site of Arteni (40°19'10.69"N/ 43°46'59.09"E, altitude 1243m), one of the best preserved complexes in the region.

The *agglomerated cells* complex, which measures 79m × 90m and occupies over 2ha, is composed of agglutinated sub-circular cells. Like others in the vicinity (Karakert, Dalarik), it is located at the front limit of a basaltic lava flow, leaning on one side against a hill and opening on the other side to the Ararat plain (Figure 7a). No passages between the cells have yet been identified; the access into and within the building remains, for now, a mystery.

A trench (Figure 7b) was opened in the heart of the *agglomerated cells*, between the western wall of a small central cell and the eastern wall of a large main cell. This trench, measuring 14.2m long and approximately 4.0m wide, was subdivided into two sectors, 'central' and 'eastern' (Figure 7b). Then, in order to excavate the whole central structure, the excavation of the central sector was extended northward over a width of 2.5m ('northern' sector).

Stratigraphy and architecture

In the small central sub-circular cell ('Area 1'), delimited by a wall made of large blocks (US 03 east, US 26 north; Figure 8a), as well as outside of this area, excavations revealed the following stratigraphical sequence:

- a surface layer (level 0), 5 to 10cm thick, whitish and very compact (presence of many roots);
- a whitish, compact 'floor' (level 1), corresponding to a re-occupation phase of the cell after the collapse of the walls. An ovi-caprine bone from US 05 has been dated to the Achaemenid period (Poz-73983: 2400 ± 30BP or 731-399 cal BC).

⁴⁷ Gasparyan 2014: 3-4.

⁴⁸ Smith 2005: 260.

⁴⁹ Arutjunjan (Harutyunyan) and Badalyan 2008: 103-107; Karakhanyan et al. 2012.

⁵⁰ Badalyan 2014: 1-3.

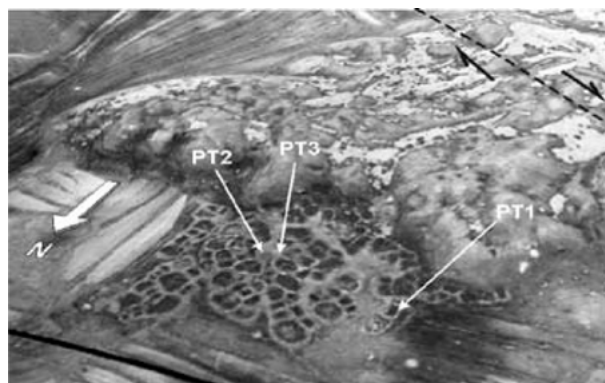


Figure 6a. Agglomerated cells in the Vardenis region:
a) Geghaqar;



Figure 7a. Agglomerated cells at Arteni:
a) view from the north

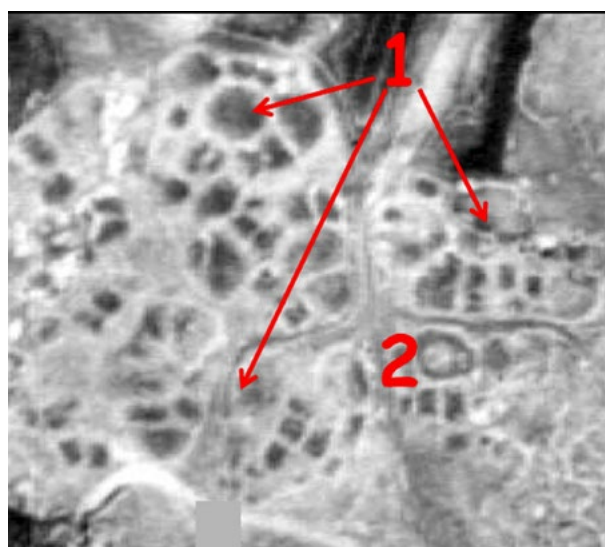


Figure 6b. Aghbradzor
(Source: Karakhanyan *et al.* 2012).

– a brown soft sediment, about thirty cm thick, covered by stones from the collapsed walls (level 2a) and likely corresponding to the phase of occupation of the *agglomerated cells* (level 2b). The wall US 26 consists of a single row of large stones (approximately 40cm wide), but in wall US 03 two or three lower courses have been preserved (Figure 8b). The collapsed stones lay on a same level and are located at the same height as the base of the first course of the wall. Thus these walls may be reasonably considered to have been built directly on the ground, without any foundation.

The amount of collapsed stones and their dimensions suggest that the walls would have been relatively high and comprised of at least four courses of superimposed stones. In this level, a wall (US 10), generally parallel to the northern wall (US 26), divides this cell into two small areas.



Figure 7b. plan (excavated sectors in red).

A charcoal sample from US 40 (level 2b) was dated to the Late Bronze Age (BETA-414709: 3100 ± 30 BP or 1430-1280 cal BC). The excavation of this area stopped this year in level 3a (US46) underlying the walls of the *agglomerated cells*.

In the eastern sector, between the small central cell and the outer wall (US 04) of the large cell, the same stratigraphy was evidenced: under the surface layer (level 0), a whitish hard layer (level 1) was found, with a dense presence of plant roots; below, stones from the collapse of the wall US 04 (level 2a) laid on a brown layer

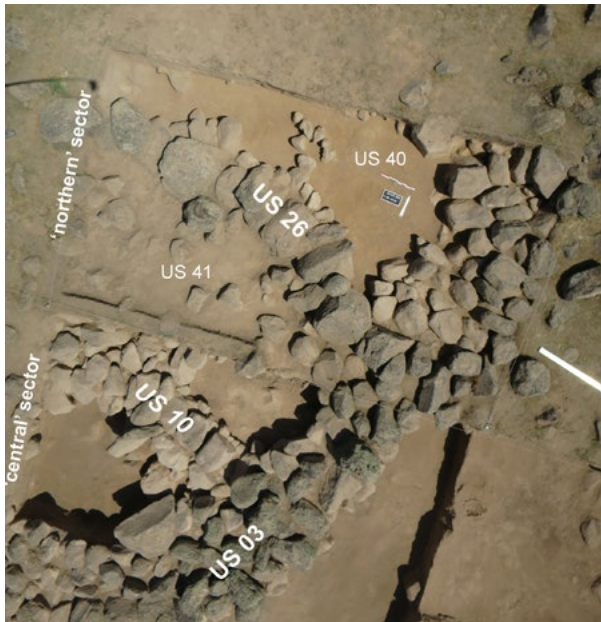


Figure 8a. Excavations: a) 'central' and 'northern' sectors;



Figure 8b. wall US 03.

(level 2b) much softer, which probably corresponds to the occupation phase of the *agglomerated cells*, because it lays at the same level as the base of wall US 04. In this level (2b), a wall (US 34) composed of a row of very large stones encompassed an oval area (US 28) with the same brown sediment (Figure 9). The function of this structure remains unknown.

In this sector, excavations continued below the base of the wall (US 04). In level 3, the sediment texture is similar to that of level 2, but its colour gradually changes from brown to yellow.

In the upper part of this level (3a), close to the wall (US 34), in the southeast corner of the trench (US 32), a

large amount of material was found: ceramics, obsidian artefacts, and faunal remains. Most of the sector was filled with stones collapsed from a curvilinear wall (US 43), oriented SW-NE (Figure 10), which had been built in the previous phase (level 3b).

The amount of collapsed stones on either side of this wall suggests that it originally consisted of several superimposed courses. The excavated area is too small to give a clear idea of this structure; however there could have been a habitation, especially because within the area (US 44) defined by the wall several artefacts were discovered, including a bone pin and a sub-circular token made from a pottery shard. A bone sample from (US 44) was dated to the beginning of the Middle Bronze Age (Poz-75364: 3780 ± 40 BP or 2342-2042 cal BC).

Material

Faunal remains, pottery shards and a large amount of obsidian flakes were found during the excavations. Obsidian is available in abundance on the neighbouring volcano Arteni, northwest of the site, the nearest outcrops being less than 2km far. Most of the pieces found in excavations are raw flakes; very few retouched artefacts were found on the surface.

As for the pottery it is important to note that, among the 161 shards, the diagnostic ones are rare. Even so, the analysis of the ceramics (Table I) from the different layers of the site shows the existence of very typical pieces of MB II and LB II periods. Morphological and technological characters of some well preserved shards let us attribute 19 pieces to the early stage of the Middle Bronze Trialeti-Vanadzor culture (23/22nd – beginning of 19th centuries). Fragments of a coloured hydria (Table V-d), a conical bowl (Table II-a), a big bowl with a lightly accented rim (Table III-c) are typical of the Trialeti-Vanadzor culture pottery complex and are mainly found in the early period burials.

The next largest group of ceramic samples (16) is very typical of the I and II stages of the Late Bronze Lchashen-Metsamor culture. Direct parallels to some samples from Arteni (for example Table IV) can be found in sites assigned to the Late Bronze period located in Armenia and Georgia, such as Metsamor, Tsakhkahovit, Stepanavan, Pewrebi, Treli, Shirakavan,⁵¹ etc. The possible chronological limits for this group can be the end of the 16th century and the 13th century BC.⁵²

In level 3b, the deepest reached so far, a bone pin with a flattened, laterally expanded head was found (Table

⁵¹ Devedjian 2001, Table VII/6-7; Khanzadian 1995, Plate 42/6, 48/3; Lindsy 2005, Table 3/4-6; Pitskhelauri 2005, Table 72, 113-114, 181.

⁵² Avetisyan 2014: 82-84.



Figure 9. 'Eastern' sector: level 2b.



Figure 10. 'Eastern' sector: level 3b.

VI-c). In the same context (US 44), a sub-circular token had been made from a pottery shard (Table VI-b).

Conclusion

The stratigraphical sequence of the *agglomerated cells* at Arteni (Figure 11), supported by C14 dates and the study of the pottery, shows that the stone structure would have been built in the Late Bronze Age (level 2), then

abandoned and reoccupied during the Achaemenid period (level 1). But the area had been occupied earlier; the lowest phase reached so far belonging to the beginning of the Middle Bronze Age (level 3b).

This Middle Bronze Age occupation parallels the data provided by the *agglomerated cells* in south-eastern Aragats and in the Vardenis region. A careful study of the architectural remains in level 3 on the overall

2	Cent. sect. Inside ar. 1	Surface	1	1		1				
3	Eastern sec.	Surface	1	2		1				1
4	Cent. sect. Outside ar.1	Surface	1	2			2			
5	Cent. sect. Inside ar. 1	1	5	1			1			
6	Cent. sect. Inside ar. 1	1	5	2	2					
8	North. Sec	1	25	2			2			
9	North. Sec	1	25	2			2			
10	Cent. sect. Inside ar. 1	1	5	1		1				
11	Cent. sect. Outside ar.1	1	6	3			2		1	
12	E sect.	1	18	8			7		1	
1	Cent. sect. Outside ar.1	2a	7	1			1			
7	Cent. sect. Outside ar.1	2a	7	1			1			
15	E sect.	2a	22	8		6			2	
29	E sect.	2a	23	14			11			3
23	E sect.	2a	23	3		1			2	
24	E sect.	2b	28	3			2		1	
25	E sect.	2b	30	6			4		2	
26	Cent. sect. Outside ar.1	2b	11	2		2				
27	E sect.	2b	29	4			3			1
14	Cent. sect. Inside ar. 1	2b	14	2			2			
35	N sect.	2b	40	6			5			1
13	Cent. sect. Inside ar. 1	3a	15	2			1		1	
17	E sect.	3a	32	12			7		2	3
18	E sect.	3a	32	1						1
19	E sect.	3a	32	1			1			
20	E sect.	3a	33	1					1	
21	E sect.	3a	33	4	2			1		1
22	E sect.	3a	33	4			2			2
28	E sect.	3a	37	8			8			
30	E sect.	3a	38	17	1		15			2
36	E sect.	3a	39	1			1			
16	Cent. sect. Outside ar.1	3b	16	7		1	6			
31	E sect.	3b	42	11		9			2	
32	E sect.	3b	44	1		1				
33	E sect.	3b	44	1		1				
34	E sect.	3b	45	8			5		2	1
37	E sect.	3b	43	1		1				
38	E sect.	3b	44	7	1		4		2	

Table I. The diagnostic table of shards from Arteni (2015).

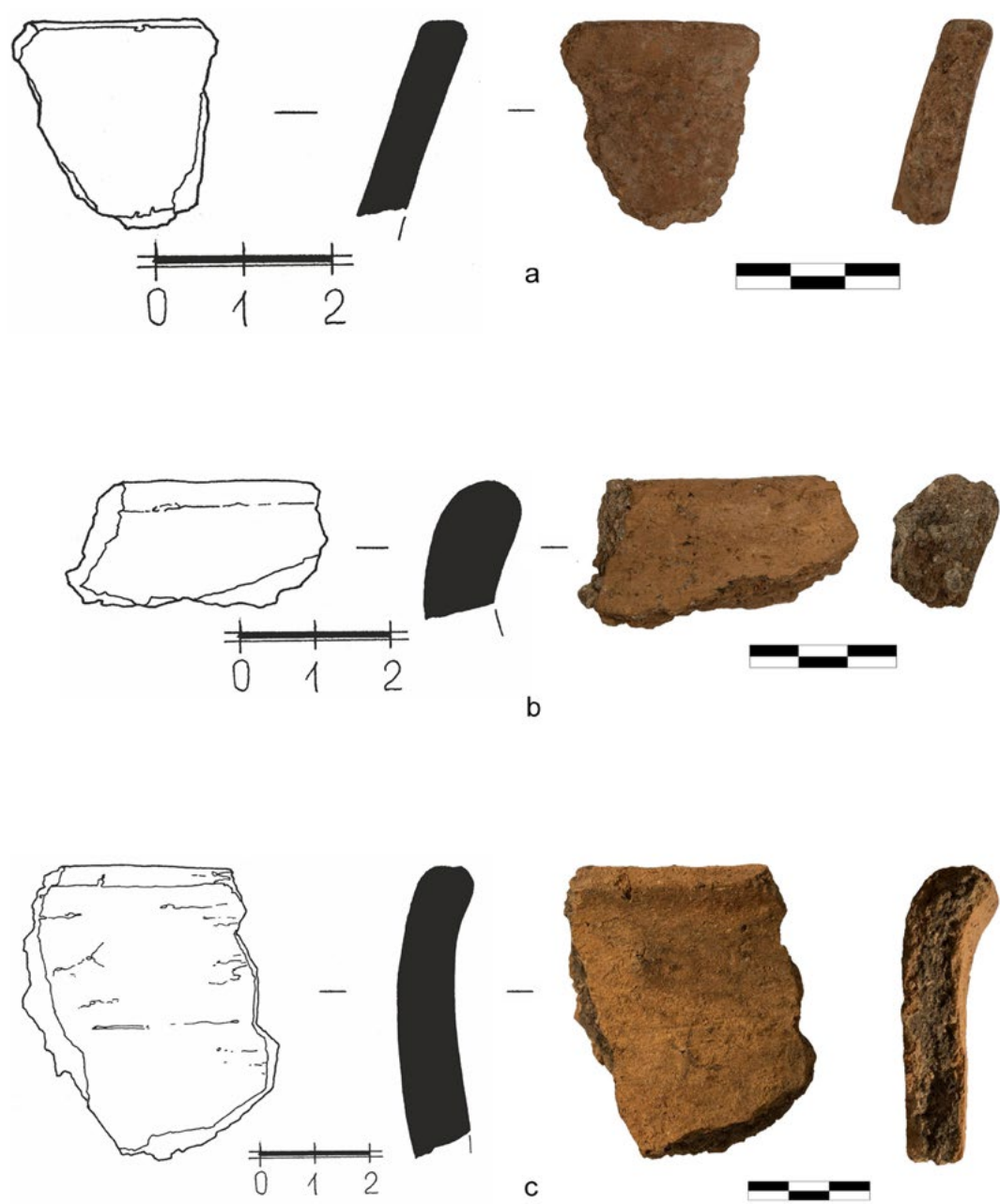


Table II Pottery sherds (layer 2a): a-c) US 23.



Table III Pottery sherds (layer 2b): a) US 40 ; b)US 28; c-d) US 30.

surface of the complex will give invaluable insight as to the function of this kind of structure and its chronological-cultural placement.

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Table IV Pottery sherds (layer 3a): US 32.

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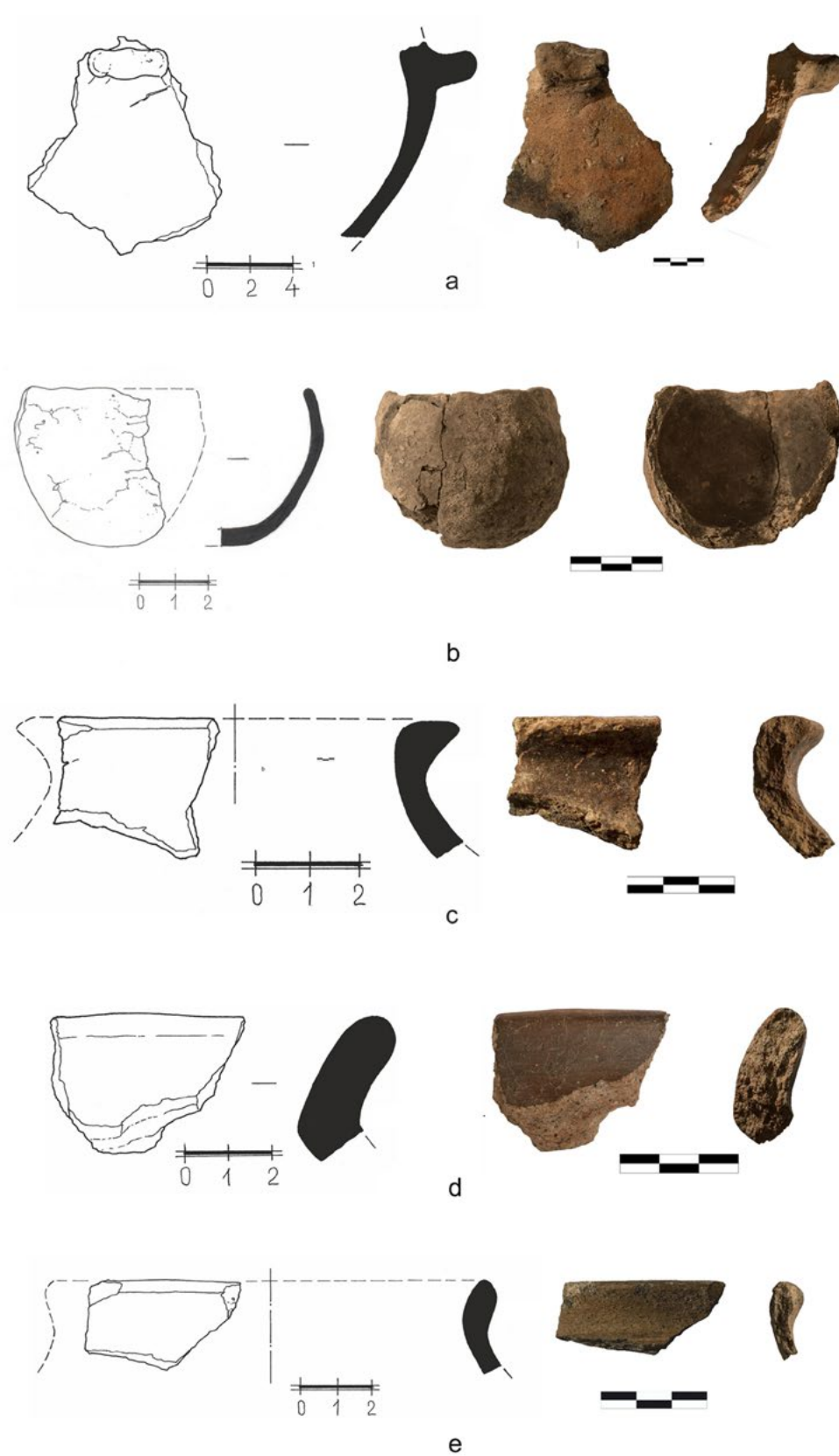


Table V Pottery sherds: a-b) layer 3a (US 32); c) layer 3a (US 33); d) layer 3b (US 45); e) layer 3b (US 16).

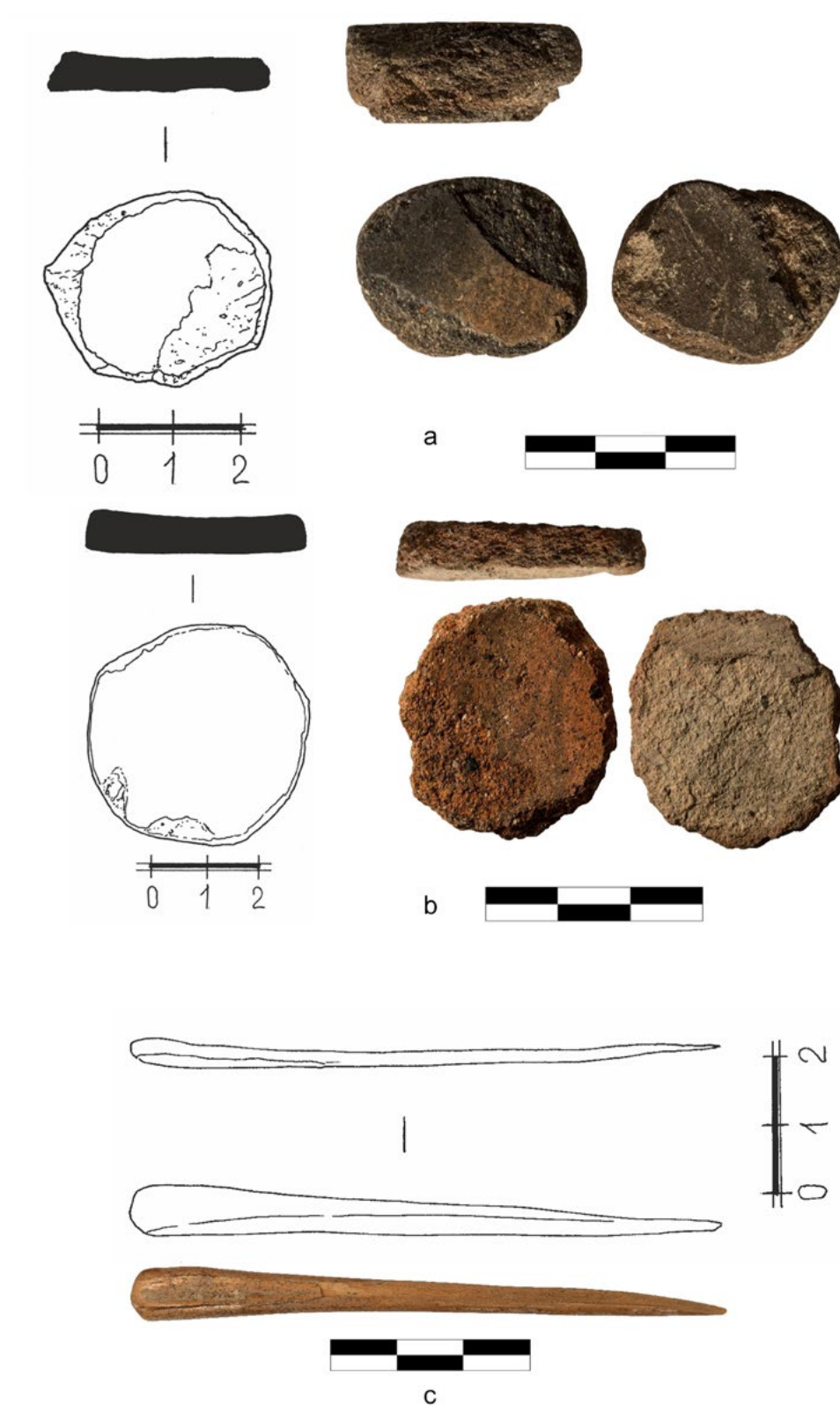


Table VI a) Clay token from layer 3a (US 33); b) clay token from layer 3b (US 44);
c) bone needle from layer 3b (US 44).

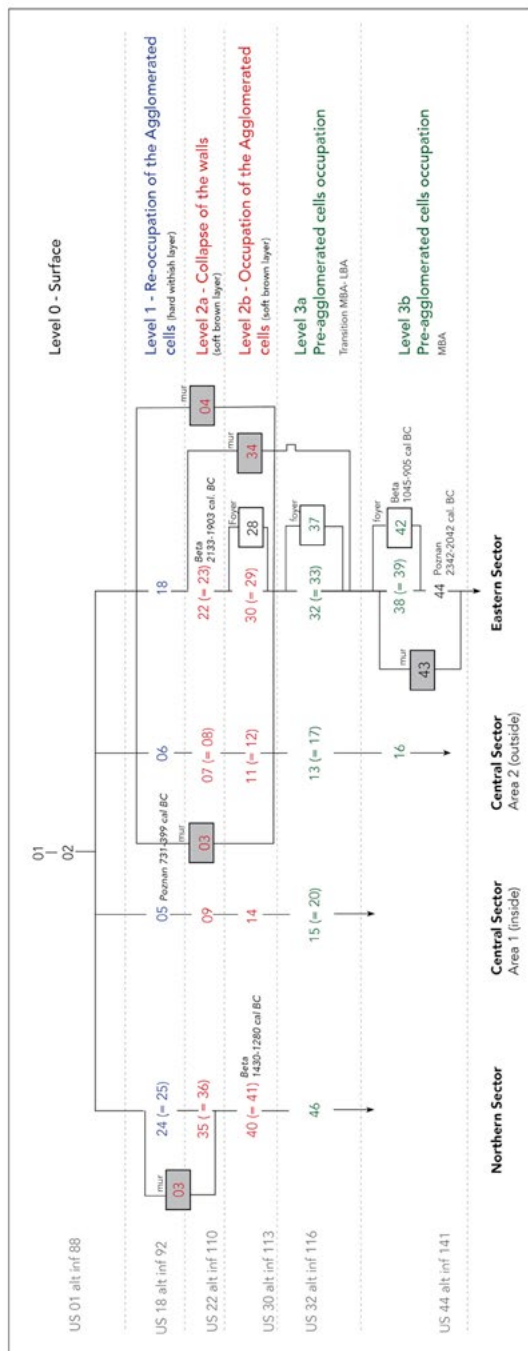


Figure 11. Stratigraphic sequence of the agglomerated cells of Arteni.

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Political Economy of Carthage: The Carthaginian Constitution as Reconstructed through Archaeology, Historical Texts and Epigraphy

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Abstract: Carthage was founded around the end of the 9th century BC as one of a series of Tyrian colonies stretching across and beyond the Mediterranean. As the power and influence of Tyre was reduced due to shifting Levantine geopolitics in the early 6th century BC, Carthage became the premier arbiter of both commercial and military interests in the Phoenician-Punic world. A colonial ideology was formalized via a written constitution, preserved today only in secondary classical sources. Combining historical, epigraphic, and archaeological lines of data provides the opportunity to reconstruct the political economy of Carthage as the polity adapted to the rapidly changing regional balances of power in the mid- to late-first millennium BC.

Keywords: Carthaginian Empire; Phoenician and Punic Government; Iron Age Political Economy; Northwest Semitic Peoples; Ancient Law of Carthage; Constitutional History

The economy and social behaviors of any group inform and are influenced by its political organization. Empires in particular politicize their actions and the actions of their dependents through the creation of recorded histories.¹ Lying at the heart of the institutionalization and codification of any hierarchy is the redistributive surplus economy,² as dependents are either incentivized (through gains in wealth or the inertia of tradition) or coerced into being productive members of the community.³ This is a broad yet persistent stroke describing the ways that economies function, be they based on gift exchange or market forces.⁴ Although cultural differences in any given community account for just how resources are redistributed or conserved, and for the types of penalties imposed on disobedient members, proscriptions and incentives for how to treat surplus hoarding behaviors are fundamental components of any ideological system.⁵ Surplus wealth in its abstract form (metals, jade, ivory, glass, dentalia, etc.) lubricates social transactions by symbolizing subsistence surplus needed for biological survival (wheat, rice, salmon, etc.). Political norms and mores create the behavioral boundary conditions for economic transactions.

The archaeological record often readily reflects the material bases for a given political economy, or at least the residues thereof, with organic and inorganic artifacts and ecofacts representing the physical transactions and negotiations that resulted from the political infrastructure. In some cultural contexts, this political infrastructure is rarely represented in as full

an historical form as the economic infrastructure is in the archaeological record. To reconstruct the political economic aspects and mechanisms of a culture requires archaeology, epigraphy, historical texts, and for groups to which ethnographic investigations can be applied directly to a remembered past, oral histories.⁶

As a case in point, the Carthaginian political system had redistribution of surplus wealth in the form of land and political titles embedded in its constitutional system, which aided its ideological and physical transformation from a colony to an expansionist state. The goal of this paper is to reconstruct as fully as possible the Carthaginian political system, rooted in its famous constitution, in order to delineate key aspects of the imperial political economy. The Carthaginian state was destroyed by Rome in 146 BC, and nearly all Punic historical texts were lost. Therefore, reconstruction of Carthaginian legal culture via text is dependent on the histories written by erstwhile allies or enemies of the state, namely Hebrew, Greek, and Latin sources, creating 'distortion' in the historical record.⁷ Thousands of Punic votive monuments have been recovered from secondary contexts following their removal from the sacrificial precinct (*tophet*) by Romans to other locations across the city. These strictly formulaic Punic inscriptions offer a wealth of information on religion, titles, gender, and lineages making them useful in reconstructing some social norms of the capital, but are rather devoid of historical information.

The colony of Carthage, historically founded in 814 BC and with the first archaeological evidence dating roughly

¹ Areshian 2013.

² Earle 1997; Morehart 2014.

³ Stanish 2010.

⁴ See also Mauss 1990; Polanyi 1957; Stanish 1997; White 1959.

⁵ Brooks *et al.* 1984: 299; Hayden 2011.

⁶ Echo-Hawk 2000; Wylie 1985.

⁷ Areshian 2013.

to this period,⁸ was to surpass all other Phoenician colonies due to a combination of strategic location in the Central Mediterranean, an incipient role in the specialized manufacture of wrought iron and steel,⁹ and an effective political system. The lapse of Tyre in the 6th century BC and the vacuum that it created after its fall to Babylon was the spark that allowed Carthage to emerge as the most powerful Phoenician city-state. The removal of Tyre meant that the enormously profitable trade network that it had built up over centuries was now precariously placed. Tyrian colonies, local elites in Sardinia, Sicily, North Africa, and especially the Iberian Peninsula were forced to restructure their alliances and reorient their hierarchies that had been based in the silver trade running from the 10th-6th centuries BC.¹⁰ The destructions and abandonments witnessed during the 'crisis of the 6th century BC' can be seen as a combination of internecine conflict and external jockeying for power. Although the exact processes of reorientation cannot be reconstructed in full, what is clear from the subsequent material culture is that Carthage emerged as the new power broker of the Punic world in lieu of Tyre.

Carthaginian Independence

Phoenicians from Tyre founded Carthage as a colony around the end of the 9th century BC. The first we hear from the classical sources regarding Carthaginian independence comes from Diodorus Siculus (V:16:1-3), who explains that Carthage founded its first colonies on the Balearic Islands ca. 654 BC.¹¹ However, it is not until the historical and archaeological 'convergence'¹² of the Neo-Babylonian siege of 573 BC does Carthage emerge as the most dominant Phoenician city. Nebuchadnezzar invested Tyre for thirteen years (585-573 BC), cutting it off from its foreign and local holdings and sources of wealth.¹³ Although Tyre continued to be independent or mostly autonomous until its destruction by Alexander the Great in 332 BC, its power base had been curtailed. It is around the time of the Neo-Babylonian siege that classical authors begin to discuss Carthaginian military activity. In ca. 580 BC, Greeks under the command of Pentathlos of Cnidos attempted to drive the Phoenicians from Lilybaeum on Sicily.¹⁴ This would have placed the Phoenician shipping routes to the Iberian Peninsula in peril. Shortly afterward, Carthage sent an army under Malchus (likely a mishearing of מלך, *mlk*, 'king'), to repel the Greeks.¹⁵ He was successful, and there is seen archaeologically a bolstering of defenses on

Sicily. By 580 BC, a defensive wall was built for Motya, and between 575-525 BC a causeway was constructed between the island and mainland.¹⁶ A number of other military actions conducted by the Carthaginians were undertaken over the next centuries, which indicates not only their independence, but imperial aspirations.

There is no question that the Carthaginian military outstripped its Phoenician ancestors and contemporaries. Naval prowess was buoyed by terrestrial operations, including the hiring of mercenaries¹⁷ and recruiting of subject troops from North Africa to Spain, whilst maintaining an officer corps comprised of citizens. Contemporary to these geopolitical circumstances during which Carthage secured its position as the champion of the Phoenician peoples, ferrous technology came to be held by the state as a strategic endeavor and was applied to warfare.¹⁸

The Carthaginian Political System as Reconstructed from Text and Epigraphy

'...not only are many of the Greeks bad, but many of the Barbarians are refined—Indians and Aryans, for example, and, further, Romans and Carthaginians, who carry on their governments so admirably.' (Strabo, quoting Eratosthenes, *Geography* I.4.9)¹⁹

The most reliable and detailed textual source for reconstruction of the Carthaginian political system is Aristotle's *Politics*, written in the 4th century BC. By this time, Carthaginians had developed a constitution that was unique in many ways from their Mediterranean counterparts. The full text of the constitution is not known due to the loss of Punic texts during the Roman destruction, but many facts have been preserved. The government was comprised of a Senate, known as the One Hundred and Four and populated by men with the title of 'judge' (II.viii.2). An additional Council of Elders, which Aristotle names the Supreme Magistracy of the Hundred (II.viii.4), was subordinate to the Senate. One of the most striking features was the Popular, or People's Assembly, praised by Aristotle as a democratic achievement 'that does not exist under the other constitutions' (II.viii.3). The state was led executively by kings and generals through the Magonid period, after which point greater democratization brought about leadership by judges and generals.

i. Kings, Generals, Judges

Kingship was the oldest form of rule among the Phoenicians, accompanied by a Council of Elders.²⁰

⁸ Docter *et al.* 2008; Docter *et al.* 2005.

⁹ Kaufman *et al.* 2016.

¹⁰ Johnston and Kaufman (forthcoming)

¹¹ Katzenstein 1997: 293.

¹² Dever 2001.

¹³ Diakonoff 1992.

¹⁴ Warmington 1969: 41.

¹⁵ Lancel 1995: 112.

¹⁶ Warmington 1969: 43; Whitaker 1921: 142.

¹⁷ Fariselli 2002.

¹⁸ Kaufman *et al.* 2016.

¹⁹ Jones 1997.

²⁰ Lancel 1995: 113.

Carthage remained subordinate to the Tyrian system until Nebuchadnezzar's siege ending in 573 BC, and as mentioned above it is during the siege (ca. 580 BC) that the classical sources first mention an independent Carthaginian leader engaging in military action.²¹ There is further evidence of governmental shifts during this time. After a tradition of some 1,300 years of kings at Tyre, the office of judge, שפֿט (špī), was established in the city in the early 6th century BC, perhaps with two judges serving as executives at once.²² At Carthage, it seems that judges began to play a more directly leading role in the 4th or 3rd centuries BC at which point they adopted executive powers in an office known as the *Suffetate*.

Kings and judges seemed to have also played a role in the military elite. Many ancient Greek writers used the term βασιλεύς for Carthaginian leaders, indicating hereditary kingship.²³ However, Latin authors would interchange between *basileus*, *rex*, and *sufes*. The first Carthaginian champion, Malchus, to emerge and defend Phoenician establishments in western Sicily following the encroachments of Pentathlos of Cnidos, was referred to as *Dux*, or general (Justin XVIII: 7; Lancel 1995: 111, 117). Aristotle makes it clear that rulers at Carthage, including kings and generals, had to fulfill two main prerequisites, neither having to do with lineage: wealth and merit (II.viii.5). He sees this is a third, hybrid type of system, merging both oligarchy (wealth) and aristocracy (merit). Warmington suggests²⁴ that a landed aristocracy rooted in a tradition of merchant princes gave birth to a warrior class, the two spheres representing the fundamental division in Carthaginian society and politics known in later Barcid times.

The idea of Phoenician merchant princes is one generally drawn from Phoenician scholarship.²⁵ Hannibal, following his role as commander of all Carthaginian forces, briefly assumed the *Suffetate* (jointly with another unknown judge) in 196 BC (Livy XXXIII: 46.3; Lancel 1998). Hannibal angered many officials due to the fact that he changed the rules of judgeship, canceling life-long tenure, and the fallout from this maneuver likely played a role in his later flight to exile. This indicates that at least in the years preceding Hannibal, and perhaps since its inception, the title of judge was virtually irrevocable. Epigraphic funerary evidence supports this, with a title of judge often inscribed on *tophet* stelae.²⁶ In the first half of the 2nd century BC, two sons of the same father are inscribed as judges on a Punic inscription in Sardinia,²⁷

supporting the idea that a title of judgeship could be hereditary. These judicial titles could mean that their bearers were likely members of, or eligible to serve in, one of the legislative or judicial houses, or Boards. Aristotle writes that officers of the Supreme Magistracy of the Hundred 'are in power after they have gone out of office and before they have actually entered upon it' (II.viii.4). The top judges had powers to summon the Senate and the People's Assembly (Diodorus Siculus XXV: 16; Polybius III: 33).²⁸ The judges Shofet (a personal name literally meaning 'Judge') and Adonba'al oversaw major urban works employing craftspeople and laborers during the construction of the New Gate, known from the longest extant Carthaginian inscription commonly referred to as the Urbanistic Inscription.²⁹ For a compendium of royal or aristocratic titles found epigraphically, including Phoenician kings across the Mediterranean, see Filigheddu.³⁰

Some scholars have acknowledged the confusion evident throughout the textual tradition and the epigraphic data, calling into question whether there was ever a king, or if the seemingly interchangeable role of the king, head judge, and head general were ever distinct from one another.³¹ Generalship seems always to be associated with kingship in the earlier periods as in the 6th century BC, and later among the Magonids and Barcids.³²

ii. Senate, Council of Elders, Tribunals

The major lawmaking entity of Carthage was the One Hundred and Four, or Senate. The Senate met in a building near the agora or forum, the location of which is unknown archaeologically, and the judges would publicly dispense justice outdoors (Appian, Lib., 128; Diodorus Siculus, XX: 44.5).³³

Subordinate to this body was the Supreme Magistracy of the Hundred, or Council of Elders, which included officers who were appointed to this assembly by Pentarchies, or Boards of Five. These Pentarchies were tribunals or courts comprised of judges, and were founded in 396 BC.³⁴ It is important to emphasize that before the position of judge was synonymous with the executive branch, it was an official title that enabled its holder to fill senatorial and judicial functions. By the time of the Punic Wars in the 3rd century BC, a permanent senatorial committee of thirty members was established, the members of which sometimes

²¹ Warmington 1969: 42.

²² Katzenstein 1997: 340; Lancel 1998: 188; Sznycer 1978.

²³ Warmington 1969: 139.

²⁴ Warmington 1969: 139.

²⁵ Katzenstein 1997: 272.

²⁶ Kaufman 2009; 2014.

²⁷ Donner and Röllig 1968: 66; Katzenstein 1997: 341.

²⁸ Warmington 1969: 140.

²⁹ Kaufman 2014: 110-125.

³⁰ Filigheddu 2008.

³¹ Gsell 1921: 194; Lancel 1995: 117.

³² Lancel 1995: 113.

³³ Warmington 1969: 132.

³⁴ Lancel 1995: 114.

accompanied the generals abroad where they acted as ambassadors (Livy XXX: 16).³⁵

Receiving no pay for their governmental duties, the title of judge was a mark of honor and distinction. It enabled its holder to influence politics, perhaps sometimes with an eye toward protecting commercial investments. Boards of judges also acted as lawgivers, adjudicating lawsuits brought to the state. Instead of different branches of courts holding specific types of trials, such as at Sparta, all lawsuits were brought before these fixed Boards (Aristotle II.viii.4; also III.i.8).

iii. People's Assembly

One of the most striking features of Carthaginian democracy was the People's Assembly. Matters and proposals could be referred to this body when the king and elders unanimously agreed to do so. Furthermore, if a specific issue failed to reach consensus between these latter two, it would be put forth to the people (Aristotle II.viii.3).

The People's Assembly possessed the unprecedented power of allowing any citizen to speak and petition against proposals brought to it by the other governmental bodies (Aristotle II.viii.3). Even when the king addressed the assembly, any citizen had the right to debate. Hannibal appealed to the People's Assembly to revoke lifelong tenure of the judges, and succeeded in creating annual elections without the possibility of serving two consecutive years (Livy XXXIII: 46).³⁶ The People's Assembly also had the power to elect generals from the First Punic War onward (Diodorus Siculus XXV:8; Polybius I: 82,12). Lancel points out³⁷ that whereas Aristotle praised this assembly's incorporation of everyman in the 4th century BC, Polybius labeled this as a flawed constitutional infrastructure dangerous to the state by acquiescing to the common masses rather than keeping policy decisions in the hands of a supposedly cool-minded elite in times of crisis (Polybius VI: 51).

iv. Citizenship and Other Titles

Specific functionaries operating in the Carthaginian government are known to scholarship through text and epigraphy, but surely many more existed that exceed our knowledge. Textually, there are references to a state treasurer, censor of morals (Livy XXXIII; Nepos, *Hamilcar*, III: 2),³⁸ and epigraphically to functionaries such as accountants.³⁹ Epigraphically, there are also multiple declarations of citizenship. There are some

nine instances of 'Citizen of Tyre' at Carthage and Sabratha in Libya, 'Citizen of Carthage' in Tyre, and 'Man of Sidon, Priest' in Sardinia.⁴⁰ Citizenship at Carthage was not exclusively limited to Phoenician ethnicity, as two of Hannibal's officers were part Syracusan but also Carthaginian (Livy XXIV: 6.2; Polybius VII: 2.4).⁴¹ There are also further epigraphic attestations of scribes, priests,⁴² a chief valuer,⁴³ as well as judges.

In the last decades of the city's existence, a school of Pythagoreans was established. Furthermore, one Carthaginian is known to have held a reputable academic position abroad in Athens: Hasdrubal became head of the Academy at Athens in 129 BC, seventeen years after the Roman destruction of Carthage (Cicero, *Tusc.*, III: 22.54; Diog. Laert. IV: 67).⁴⁴

v. Military Tradition

A full treatment of the textual sources dealing with the Carthaginian military is not suitable for the current paper, as the bulk of Greek and Roman classical historians were mostly fixated on this aspect of Carthaginian society and the relevant literature is vast. Instead, a limited treatment is offered here dealing with the salient features of the Carthaginian military insofar as it relates to their legal system. As Tyre relied heavily on mercenaries to defend its walls (Ezekiel 26:10-11),⁴⁵ Carthage too sought the bulk of its armed forces from soldiers for hire and subject populations,⁴⁶ likely also enticing native troops to join voluntarily. The officer corps seems to have been comprised of Carthaginian citizens, likely stemming from certain families of the landed aristocracy that sought wealth abroad, but through naval rather than merchant seagoing endeavors. With the expedition of Malchus in the 6th century BC, land forces began to be employed in earnest.

From a constitutional standpoint, military honors were granted officially. An armlet was issued to a Carthaginian citizen for every campaign in which he served (Aristotle, *Politics*, VII.ii.6), promoting valor and loyalty by encouraging service members to exhibit a conspicuous display of belonging and bravery. Warmington hypothesizes that, unlike their contemporary Roman consuls, Carthaginian generals took the field for several years and were therefore highly experienced.⁴⁷ Their tactics were based on a tempered

³⁵ Warmington 1969: 141.

³⁶ Lancel 1995: 119.

³⁷ Lancel 1995: 118.

³⁸ Warmington 1969: 140.

³⁹ Lancel 1995: 120; Sznycer 1978: 585.

⁴⁰ Bordreuil and Ferjaoui 1988; Kaufman 2009; Stieglitz 1990.

⁴¹ Lancel 1995: 120.

⁴² Charles-Picard and Charles-Picard 1958.

⁴³ Lancel 1995: 120; CIS I: 132.

⁴⁴ Warmington 1969: 152.

⁴⁵ Katzenstein 1997: 156.

⁴⁶ Fariselli 2002.

⁴⁷ Warmington 1969: 143.

approach and conservative policies of engagement, as failure in battle allegedly often resulted in crucifixion.

An early focus on iron production as a Phoenician colony allowed the Carthaginians to refine this technology over many centuries. Iron and steel production offered the state a chance to develop a competitive advantage regarding ferrous technological approaches to warfare, not to mention agriculture and trade.⁴⁸ Investment in centralized ferrous technology and commissioning of metallurgical precincts can be posited as a behavioral mechanism of the Punic state to promote their role as the new political center of the Phoenician world. Based on the archaeological evidence, following independence, it seems likely that the Carthaginian state took over from the Tyrian state in controlling the production of metals in the Punic World just after a period often termed the ‘crisis of the 6th century BC’, discussed in greater depth below.

vi. *Other Constitutional Provisions Regarding Officeholders and Common Citizens*

Besides the aforementioned aspects of the Carthaginian constitution, a few other principles are known to us from Aristotle. Kingship was not limited to bloodline (II.viii.2). One man could hold multiple offices simultaneously, considered a distinction among Carthaginians but held as inefficient by Aristotle (II.viii.8). Politicians were allowed to engage in business (and control over the affairs of this business was likely a major incentive for them to hold office), unlike other Mediterranean oligarchies (V.x.4). According to Aristotle, the constitution was noteworthy for its general concern of the common people (IV.v.11), as demonstrated by the existence of the People’s Assembly. The fact that a tyrant never arose in Carthage before or during his lifetime was ‘proof of a well-regulated constitution’ (II.viii.1). As if this was a challenge made by Aristotle, just years after the philosopher’s death, Bomilcar did attempt to seize absolute power (308 BC) and was consequently tortured and killed by the people (Diodorus Siculus XX: 43-4).⁴⁹

Essential to the discussion of redistributive surplus, attempts to redistribute wealth were embedded in the constitution, as common people would often be sent abroad for political appointments in the colonies, with the goal to ‘heal the social sore and make the constitution stable’ (II.viii.9).⁵⁰ Beyond political appointments, Aristotle praises the Carthaginian policy of establishing their citizens abroad in colonial enterprises in order to ‘make them well-off’ (VI.iii.5), a Malthusian reasoning in the sense that it implies that the state sought to

decrease an apparently overcrowded citizenry from lower socioeconomic classes who could be granted state tenders abroad, providing opportunities to improve their livelihoods by establishing themselves elsewhere.⁵¹ This provision of making its citizenry well-off is reflected extensively in the archaeological record through the widespread establishment of Carthaginian colonies.

Carthaginian Expansion and Archaeology of the Punic World

The mercantile and metallurgical political economy at Carthage facilitated its expansion into the Central and Western Mediterranean, propelling the state to imperial status. A brief terminological discussion of ‘Phoenician’ may be useful. The Phoenicians themselves were essentially seagoing Canaanites from the Lebanese coastal cities such as Tyre, Sidon, and Byblos, distinct from other Northwest Semitic groups such as the Israelites, Moabites, and Aramaeans mostly because of the gods they worshipped and their maritime, metallurgical, and other technological or craft expertise. The term ‘Phoenician’ is derived from the Greek term for ‘dark-red’ or ‘purple’ (Φοινίκη), due to the Phoenician production of purple dye. It is useful to clarify what is meant by ‘Punic’ (from *Poenus*, Latinization of the Greek), often taken to denote a chronological shift from archaic-era Phoenicians to classical-era Punic people. Following traditional cultural historical scholarship, it would be ideal to assign Punic material culture to specific ethnically or linguistically similar descendants of Phoenicians. However, centuries of commercial relationships and cohabitation between Phoenicians and indigenous groups obviously created culturally diverse groups whose identities continued to be rooted in their city or region of origin rather than on a monolithic ethnic, racial, or ethno-linguistic identity.⁵²

Scholarship has tended to define the cultural context of the Punic world as an extension of Carthaginian policy, expansionary aims, and colonial strategy – an essentially centralized, political definition. The Punic world is defined as the areas in the western Mediterranean inhabited largely by descendants of Phoenician settlers, and includes the Spanish Levant or Andalusia, as well as the southwestern part of the Iberian Peninsula (including Cádiz), Ibiza, Malta, western Sicily, Sardinia, and the Maghreb. It is very difficult to quantify what percentage of certain sites would be Punic, and what parts indigenous but also adopting Phoenician-Punic material culture, and further what sites were awaiting orders from Carthage or were simply plugged into its commercial network.

⁴⁸ Kaufman 2014; Kaufman *et al.* 2016.

⁴⁹ Warmington 1969: 125.

⁵⁰ Neville 2007: 206.

⁵¹ Trigger 2006.

⁵² Kaufman 2009.

For example, the term 'Punic' is rarely used to describe actual demographic components of Hannibal's army in works such as those of Polybius, Livy, and Appian. More frequently we hear of 'Punic perfidy' as a derogatory cultural trait of the Punic world,⁵³ whereas the troops themselves are Carthaginians, Libyophoenicians, Balearic Islanders, Celtiberians, etc. It may be stated that to attempt to find Punic people is a misstep. We are rather dealing with a situation of 'hybridity'⁵⁴ and 'entanglement'⁵⁵, in which a cultural complex developed differentially in the various Punic regions and according to the specific mercantile, Semitic/indigenous, environmental, and political contexts over multiple centuries.⁵⁶ This world then produced Punic Carthaginians, Punic Libyophoenicians, Punic Balearic Islanders, Punic Celtiberians, Punic Maltese, etc. The lack of surviving texts in most of these regions, not to mention from Carthage and her environs itself, limits our ability to further quantify the 'Phoenician' core of these people groups – an ethnonym that itself was laminated over the coastal Canaanites by Greeks.

For our purposes, the task can be clarified by affiliating Punic settlements with earlier Phoenician and/or indigenous foundations which were then incorporated into a generalized Carthaginian sphere of influence, assisted by linguistic, cultural, and likely often kin-based familiarity. At Carthage itself, affiliation with the state was an important mark of identity. Working forward with the 6th century BC Carthaginian mixed model of economic mechanisms and military intervention, by the 3rd century it is much easier to define the Carthaginian world based upon distinct Carthaginian material culture such as coinage⁵⁷ although important Roman sites built over Carthaginian foundations often catalyzed into modern cities, making excavation and identification of the earlier strata difficult.

The emergence of Carthage as an imperial entity seems to have followed the Phoenician model of exploiting and adapting to local conditions that would yield commercially or politically profitable relationships to the city. Contemporary with the so-called 'crisis of the 6th century BC,' when large-scale abandonment or destruction of many urban centers combined with intensified fortification of others are characteristic of the time, Greek desires to capitalize on this relative vacuum began to come at odds with renewed Phoenician interest in the colonies under the Carthaginian, rather than the Tyrian, banner. Now, in addition to the acquisition of mineral and timber resources, Carthage

began to employ land forces in tandem with naval strength to ensure its role.

It is unclear how much violence Carthage actually employed during the 'crisis.' What is more plausible based upon the available evidence is that internal frictions caused incumbent populations to desert populated areas, and the Carthaginians capitalized on these new local conditions. In places like Sardinia, it appears that Carthaginian colonists settled together with indigenous Sardinians forming van Dommelen's hybrid culture, but also employed military tactics.⁵⁸ Whereas the Tyrians always had a navy ready to assist the Mesopotamian empires, Carthage also employed land forces. But the Carthaginian method of expansion was in some ways similar to the earlier Phoenicians. Instead of tapping into new local trade networks, Carthage was able to resurrect previous networks to her advantage.⁵⁹ Neville (2007) is correct that it is unlikely that Carthage adopted a uniform policy of conquest, as this is a monolithic explanation that can hardly account for any imperial longevity in the human past or present. Instead, a combination of control or influence over political economy, backed by force, is more likely.⁶⁰ The use of direct force with a citizen and mercenary army⁶¹ in order to implement hegemonic policy is what begins to distinguish Carthage from Tyre.

Results from across the Central and Western Mediterranean show a more or less consistent pattern during the 6th century BC. Firstly, large scale abandonment of urban centers and cessation of mining activities were the hallmark of the mid-6th century BC, which is why it is considered a so-called 'crisis'. This was followed by the appearance of Carthaginian material culture, reinforced by textual references to Carthaginian activity. The Middle Punic period (530-300 BC) at Carthage itself is also distinguished by widespread import capabilities spanning the entire Mediterranean Basin as seen in the amphorae assemblage at Bir Massouda,⁶² and substantial imports continue into the Late Punic period as well.⁶³ In recent years research has intensified for the previously relatively little-known 6th through 4th centuries BC,⁶⁴ and a synthesized picture has begun to emerge that allows for a holistic understanding of the rural aspects of the political economy across Punic territories. By the 4th century BC, the Punic political economy is characterized by rural intensification skyrocketing in the Iberian Peninsula, the Balearic Islands, Sardinia, Sicily, Malta, and North

⁵³ Lancel 1998.

⁵⁴ Tronchetti and van Dommelen 2005; van Dommelen 1997; 1998; 2002; 2006.

⁵⁵ Dietler 2010.

⁵⁶ See Vella 2005 for a good treatment.

⁵⁷ Robinson 1956.

⁵⁸ Bernardini 2008.

⁵⁹ Neville 2007: 164.

⁶⁰ Earle 1997; Stanish 2003.

⁶¹ Fariselli 2002.

⁶² Bechtold 2008, figure 10.

⁶³ Bechtold 2010.

⁶⁴ Notably the contributions in van Dommelen and Gómez Bellard 2008, which greatly inform many of the following case studies.

Africa, with new evidence coming from excavations and survey, and flora and fauna datasets.

i. The Iberian Peninsula

The Iberian Peninsula was the jewel of the Tyrian maritime commercial network. The earliest Phoenician settlements are those established at the turn of the 9th and 8th centuries BC at Doña Blanca and Morro de Mezquitilla, on the Andalusian coast, and also Huelva.⁶⁵ La Fonteta is another candidate for an earlier Phoenician foundation, with some evidence indicating 9th century Phoenician/indigenous contacts.⁶⁶ Generally across the Peninsula, botanical evidence indicates a variety of timber types, cereal cultivation of barley and some wheat, lentils, as well as figs, olives, grapes, plums, almonds, and walnuts. Faunal evidence shows cattle, pig, chicken, goat and sheep, fish, shellfish, horse, and game such as deer, rabbit, and cranes. Different sites of course contain differing amounts of the above products.⁶⁷ The mid-6th century BC witnessed a crisis in settlement, as most towns and villages were abandoned. These were reoccupied, most heavily during the 4th century BC during which many new sites were established. The Phoenician-Punic archaeology of the Iberian Peninsula is one of regionally variant interactions between the Phoenician or Carthaginian settlers on the coast and the Iberian and Tartessian inhabitants of the interior.⁶⁸

A shift in the types and preponderance of metals and mining activity represents one hallmark of the 'crisis.' Sites like Tharsis and Aznalcóllar continue producing silver, but to a far lesser extent. One of Neville's interpretations of the precipitation of the 'crisis' is the possible exhaustion of easily accessible silver mines. Conversely, both Frankenstein⁶⁹ and Neville suggest an over-saturation of silver in the Assyrian market and a corollary collapse in price. In the Early Iberian Period (550-400 BC), iron weapons are predominant in tombs whereas in the preceding periods they are totally absent.⁷⁰ This hints at connections with Carthage, as the peak of known centralized Carthaginian iron and steel production at Bir Massouda falls between 650-400 BC.⁷¹ The mineral rich zone of Huelva witnessed a cessation of construction activity in the settlements, along with a decrease in population as of 550 BC and a drop in Greek imports.⁷² Sites along the metal procurement chain on the Rio Tinto were abandoned, such as Peñalosa, and San Bartolomé de Almonte, but others such as Tejada la Vieja reflect the building up of fortifications and

intensification of agriculture and herding instead of metal production. La Fonteta also probably absorbed refugees from El Cabezo Pequeño del Estaño, a fortified wall also being constructed there (over the former metallurgical zone⁷³). At the Portuguese Atlantic site of Abul, a sanctuary dated to the 6th-5th centuries BC may be attributed to Carthaginians. Other sites across the northwest show evidence of renewed Mediterranean contacts from the 6th-4th centuries BC, with the sudden and ubiquitous appearance of Carthaginian contact through material culture such as pottery and polychrome glass.⁷⁴

Indigenous mechanisms of adaptation to this 'crisis' are characterized by a shift in settlement patterns from small settlements to large, fortified, *oppida* centers. Although commercial activity of the 6th century BC pales in comparison to the previous centuries, enough of an infrastructure remained for Carthage to seize the opportunity. Sites like Gadir, Tejada la Vieja, and for a time La Fonteta, all maintained their independence and show nucleation of population and construction of fortifications.

There is direct evidence for the substitution by Carthage of the former Phoenician long-distance trading routes in the Iberian Peninsula. Carthaginians settled at Ibiza, Villaricos, and Almuñécar. Many sites had been abandoned peacefully, but others were destroyed in conflagrations. La Fonteta was abandoned in ca. 545 BC, and La Peña Negra was destroyed.⁷⁵ If Diodorus Siculus is correct about the 654 BC date for a colony on Ibiza,⁷⁶ the Carthaginians had already established colonies of their own during the height of Tyre's power, and it is most plausible that they capitalized on these foundations to expand their influence and protect their allies in the economic and perhaps military vacuum created after the fall of Tyre to the Neo-Babylonians. Further abandonments occurred ca. 570 BC at Cerro del Villar, and at the end of the 6th century BC at Abul in Portugal.⁷⁷ Evidencing the transfer of power from abandoned centers to newly invigorated centers, Malaga was founded at the beginning of the 6th century as well.

The 6th century BC Iberian Peninsula is characterized both by internecine struggle and Carthaginian protectionism of Punic and indigenous allies as the political, economic, and military landscape was altered and renegotiated as a result of Tyre's decline. In the aftermath of a reorientation in trade and political economy, indigenous communities' decisions to align with the nascent Carthaginian Empire would have been

⁶⁵ Aubet 2008: 247; Canales *et al.* 2008: 648.

⁶⁶ González Prats *et al.* 2002.

⁶⁷ López Castro 2008.

⁶⁸ Johnston 2015.

⁶⁹ Frankenstein 1979.

⁷⁰ Sanmartí 2009: 66.

⁷¹ Docter *et al.* 2003; Kaufman *et al.* 2016.

⁷² Neville 2007: 163.

⁷³ Neville 2007: 165.

⁷⁴ González-Ruibal 2006: 128.

⁷⁵ Neville 2007: 165.

⁷⁶ Katzenstein 1997: 293.

⁷⁷ Neville 2007: 166-167.

sought differentially and according to shifting political allegiances and commercial needs.⁷⁸

ii. *Ibiza*

Prehistoric settlement in Ibiza came to an end in the 13th century BC, to be settled anew by the Phoenicians/Carthaginians in the 7th century, corresponding to Diodorus Siculus' date of 654 BC for the first Carthaginian colony abroad at Ibiza. Two villages were settled at the Bay of Ibiza, and the major town throughout the Phoenician-Punic settlement is underneath modern-day Ibiza town. Evidence of lead-silver metalworking was excavated there, and analyses have demonstrated that the mineral resource was exploited on Ibiza itself.⁷⁹ Around the mid-6th century BC, a distinctly Carthaginian imprint begins to be seen archaeologically. It appears that Carthage established a settlement at Sa Caleta, by the end of the 7th century.⁸⁰

Exploitation of silver and lead ores was perhaps a driving factor for the Carthaginian colony, as well as agricultural output. Cremation was abandoned as a practice as inhumation was adopted, resulting in a large cemetery at Puig des Molins near Ibiza town. Carthaginian and central Mediterranean typologies mark the accompanying grave goods. This period is also when the rural landscape of the island began to be exploited, perhaps by an influx of Punic settlers from Carthage. Although the data on flora and fauna are not as robust as might be desired, evidence indicates that olive oil and wine were the main products grown in Ibiza, the farms being organized centrally from Ibiza town. Salt and high-quality ceramics were secondary items produced for export. Domesticates included pigs, cattle, sheep/goats, equids, and dogs. Rural settlement was established on a large scale by the 4th century BC, and consolidated by the 3rd century. Roman control of the island following the Second Punic War resulted in a booming agricultural economy throughout the 2nd century BC, turning down at the end of this century.⁸¹

iii. *North Africa*

It is difficult to find natural harbors along most of Algeria and Morocco, but the Tunisian and western Moroccan coasts had some harbors and were utilized by Phoenician colonizers. Cape Bon, where Carthage is located, boasted some of the best agricultural land in antiquity. Southeast of Cape Bon is the fertile coastal plain, or Sahel, where many settlements were also located. Extending southwest of Cape Bon running into Algeria is the Mejerda Valley, which was utilized

extensively for cereal cultivation.⁸² Urban bias in archaeology has skewed settlement data in North Africa, but this has begun to change over the last decades. There appears to have been a villa system in place as evidenced by Fantar's⁸³ excavation at Gammarth, as well as textual descriptions of Megara, both places close to Carthage.

Despite limited knowledge of the urban layout of Carthage, some aspects of the rural realities are fortunately clear. The Carthage Survey provided some informative data about the Carthaginian hinterlands within a 30km radius of the city.⁸⁴ In the 7th-5th centuries BC, or formative phase, Punic sites are scarce, numbering only seven. Compared to later periods (4th century – nine sites, 3rd/2nd centuries – 50 sites), this indicates an early reliance on Numidian agricultural production (likely exchanged for finished iron products)⁸⁵ or on imported cereals. Modern build-up limits our knowledge of what suburban Carthage could have produced in terms of garden or estate products, as described by Mago,⁸⁶ but Cape Bon must be considered the Carthaginian heartland and first area into which its people spread.⁸⁷ The Sahel was also a fertile location of mostly oasis agriculture. Pliny (18.51) describes farms there as layered: olives growing beneath palms, pomegranates and figs beneath the olives, and grain and vegetables beneath these.⁸⁸ Pliny attributes this to a markedly Punic style of agriculture. With the increase in agricultural exploitation, cattle decreased in the areas around Carthage and gave way to goat and sheep. Wild bird populations of geese and duck dropped, giving way to domesticated birds. By the Late Punic period, the population of the hinterlands did not likely exceed 87,000 people.

The Carthaginian diet, or broadly their agricultural hallmarks, comprised of emmer wheat (which goes out of fashion during the Roman occupation), olive oil and perhaps salted olives, opium poppy seeds (and perhaps opium extract), and flax. Furthermore, the famed Carthaginian propensity for fruit growing was verified with evidence of grapes and wine,⁸⁹ figs, pomegranates, mulberries, peaches, plums, and almonds.⁹⁰ There is also evidence of wild blackberries, hawthorns, a jujube species, with limited amounts of blackberries. Further pollen evidence indicates the planting of manna ash. Imported foods include stone pine, hazelnut, and walnut.

⁸² Fentress and Docter 2008.

⁸³ Fantar 1984.

⁸⁴ Greene 1986.

⁸⁵ Kaufman *et al.* 2016.

⁸⁶ Greene 1986; Greene and Kehoe 1995; Krings 2008.

⁸⁷ Fantar 1988.

⁸⁸ Fentress and Docter 2008.

⁸⁹ Greene 1995.

⁹⁰ van Zeist *et al.* 2001: 59.

⁷⁸ See Burke 2008 for comparative interactions.

⁷⁹ Gómez Bellard 2008.

⁸⁰ Gómez Bellard 2008; Ramón 2002.

⁸¹ Gómez Bellard 2008.

Iron production inland at Numidian Althiburos in the 10th or 8th centuries BC indicates contacts between the autochthonous population and Phoenician settlers including ferrous technological transfer.⁹¹ A level dated to the end of the 9th century BC at Althiburos provided one tantalizing iron implement which indicates early contact, right around the time Carthage was founded. At Althiburos, the beginning of the 6th century BC witnesses gradual Punic influence, including perhaps actual Carthaginian settlers as evidenced by a Punic cistern, and even a defensive wall by the 3rd century BC.⁹²

Another region of convenient harbors for Carthaginian colonial expansion in the so-called African Hinterland was in Tripolitania. Phoenician and Punic settlements and epigraphic finds are known from modern-day Libya, at sites such as Lepcis Magna with Phoenician, Punic, and Neo-Punic occupations from the 7th century BC onwards,⁹³ and Sabratha⁹⁴. In the Lesser Syrtis or western Tripolitania, by the end of the 6th century BC the urban center of Zita was established on the apex of the Zarzis Peninsula,⁹⁵ with nearby Gigthis on the Gulf of Gabes (current earliest Punic evidence is 3rd century BC⁹⁶), and Meninx on the Island of Djerba (Punic settlement by the 4th century BC⁹⁷) forming an urban triangle. On Djerba (earliest pottery is a 6th century BC Ionian cup), until the 4th century BC, there was very little rural exploitation,⁹⁸ similar to the situation in Sardinia.⁹⁹ But it is only in the 4th century BC that widespread colonial settlement really took root. During the 4th century BC on the island of Djerba, rural sites began to become the predominant feature of the island. In the 3rd century BC there was a marked increase in rural sites, achieving as many as 93 farms in the 2nd century.

The southernmost known Maghrebi Phoenician establishment is on the island of Mogador, most probably within the sphere of Gaditanian influence in the 7th and 6th centuries BC, as opposed to being affiliated with Carthage.¹⁰⁰ Lixus was occupied from the 8th century BC, and may have had a mint in Punic times from the Hercules/Melqart temple.¹⁰¹ In Algeria and Morocco there were some abandonments at the end of the 6th century BC akin to the situation in Iberia Peninsula. At this time, Mogador in Morocco and

Rachgoun in Algeria both witnessed abandonment.¹⁰² There is abundant evidence for Punic style cemeteries, with the only published one being in Cherchel (Algeria). Olives were cultivated in the area around Lixus in Morocco in the 7th century BC by Phoenicians. By the 3rd and 2nd centuries BC, barley, wheat, sorghum, grapes, legumes (chickpeas, lentil, fava beans, vetch), and flax were grown there. All of these data come from Lixus, and at the time of writing no known rural survey has been carried out. At Lixus, cattle were the early domesticate as at Carthage and gave way to sheep and goat. Pigs were increasingly utilized in the Punic period.

The overall trend seems to be that early Phoenicians were not engaged in subsistence farming activities for the earliest phases of their colonization of North Africa, but relied on trade. During the 6th century BC this changed, with substantial increase in Punic agriculture taking off in the 4th through 2nd centuries BC.¹⁰³

iv. Sicily, Pantelleria, Malta

Due to the fact that the Sicilian Channel represents a choke point for east-west Mediterranean maritime travel, the western coast of Sicily and Malta represented a point of early importance for Phoenician settlement and commerce. The earliest settlement of Motya was joined by many other Sicilian sites with natural harbors and fertile valleys leading up into the mountains. Sicily became a focal point of military aggressions between Greek colonies in the eastern part of the island, and Carthaginian interests in the western part throughout the 5th and 4th centuries BC. Carthage took control of the Punic colonies in the 5th century, and by 405 BC a treaty dividing the island between Syracuse and Carthage was penned.¹⁰⁴ Archaeological finds at sites in the interior are not as clear cut in defining political hegemony (known as the Carthaginian *epikrateia*) as is the historical record for the coastal settlements, as Punic, Greek, and indigenous wares abound throughout the periods, especially at interior hilltop settlements. However, the bulk of rural settlements were established in the 4th century BC and a great deal of Punic pottery – notably North African amphorae – circulated throughout the island.

The volcanic island of Pantelleria sits right in the middle of the channel between Sicily and Cape Bon, making it an ideal advanced naval outpost. Agricultural potential of the island was utilized in the 4th century BC as well, with two thirds of all amphorae being Punic North African. 256 cisterns of Punic construction were discovered on Pantelleria. The acropolis of San Marco represents the major Punic site of the island. Although

⁹¹ Kallala *et al.* 2010; Killick 2015; Sanmartí *et al.* 2012.

⁹² Sanmartí *et al.* 2012: 33, 36–37.

⁹³ Carter 1965.

⁹⁴ Kaufman 2009.

⁹⁵ Kaufman *et al.* 2015.

⁹⁶ Mattingly 1994: 129.

⁹⁷ Fentress 2009: 73–75.

⁹⁸ Fentress and Docter 2008.

⁹⁹ van Dommelen 1997.

¹⁰⁰ Aubet 2001: 301–302.

¹⁰¹ Aranegui 2001; González-Ruibal 2006: 124; López Pardo 1992.

¹⁰² Neville 2007: 166.

¹⁰³ Fentress and Docter 2008.

¹⁰⁴ Spanò Giammellaro *et al.* 2008.

the exact date of earliest Phoenician settlement is disputed, it is clear that the site at Rabat-Mdina was an early nucleated site. Recent work there has identified 19 rural settlement and 642 burials dating to the Phoenician-Punic period.¹⁰⁵

The Maltese countryside was also intensively exploited from the 4th-3rd centuries onward, but lacked mineral wealth that would have attracted intensive Phoenician or Carthaginian occupation.¹⁰⁶ It is hard to pinpoint an exclusive Phoenician or Carthaginian Punic presence in the island population, as Greek, Roman, and indigenous traits accompany the material culture through all periods.¹⁰⁷ But Sagona places permanent Phoenician colonial activity by the last half of the 8th century BC¹⁰⁸ (no well-contextualized evidence can be dated before ca. 750 BC¹⁰⁹), with a distinctive Punic occupation from ca. 500-300 BC.

v. Sardinia

Carthage took control of the island by the last half of the 6th century BC. Archaeological evidence is furnished by the destruction of a ritual center at Cuccureddus of Vallasimius ca. 530 BC, destruction of the settlement of Monte Sirai ca. 520 BC, and the accompanying influx of Carthaginian material culture including gold workshops.¹¹⁰ All rural sites were abandoned in the late 6th century. The 4th century saw the establishment of mostly farms, cemeteries and cult sites. There are a number of *tophets* found on the island, and many sites have indigenous *nuraghi* incorporated into Punic architecture.¹¹¹ From the 5th to 3rd centuries BC at Tharros, a metallurgical facility with furnaces, slag, and Carthaginian coins was most likely a Carthaginian mint.¹¹²

Sardinia was originally characterized as having 'capillary' settlement types, meaning almost all of the island would be covered by sites but would contract during certain periods. There seems to be a general retraction of rural sites from the 6th to 5th centuries BC, then reversing course and gaining ground in the 4th century BC, but not fully fluorescing until the Roman period.¹¹³ The only Punic town that has been exhaustively excavated is Neapolis. Naked wheat, grapes, sheep, pigs, cattle, dogs, deer, ducks, foxes, and wild boar make up the bulk of floral and faunal evidence. The earlier Phoenician sites contain more game animals than domesticates, which is not

surprising as other early Phoenician sites also show that the early colonists relied on native agricultural output¹¹⁴ likely supplemented by hunting. The mineral wealth of Sardinia, in addition to its strategic position, was highly attractive to the Carthaginian state in the formative phase of empire.

Conclusion

The emergence of Carthage as an international power began in the 7th-6th centuries BC, as its citizens founded their own colonies such as on Ibiza and in the African hinterland. By the first quarter of the 6th century BC, as Tyre's power was abruptly cut short, Carthage focused and expressed its expansionist and protectionist policies via the formation of a military class and a colonial ideology used to enable social mobility for its poorer citizens and 'heal the social sore', codified in constitutional format. It is at this time that a distinction emerges between Phoenician and Carthaginian systems. This began not as a linguistic, ethnic, or political divide alone, but rather as one between the old Phoenician merchant class and the nouveau Punic generals at Carthage itself. By the 4th century BC, Carthage had expanded to such an extent that tensions with Greek states and the Roman Republic began to increase. Whereas it was the overarching Tyrian mercantile network that allowed for the Phoenician world to maintain its distinct commercial character across the Mediterranean and Near East through the transport and refinement of mineral resources and technological and craft specializations, certain elements within Carthage transformed the state apparatus to claim and leverage this wealth through the establishment and deployment of an army and navy, the forging of new alliances during the 'crisis of the 6th century BC', and the activation of its growing populous to carry its influence abroad and make its citizens 'well-off'.

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¹⁰⁵ Spanò Giammellaro et al. 2008.

¹⁰⁶ Spanò Giammellaro et al. 2008; Vella 2005: 444.

¹⁰⁷ Sagona 2008: 488.

¹⁰⁸ Sagona 2008: 513, 525-32.

¹⁰⁹ Vella 2005: 439-40.

¹¹⁰ Bernardini 2008: 573.

¹¹¹ van Dommelen and Finocchi 2008.

¹¹² Attanasio et al. 2001; Manfredi 1997.

¹¹³ Bernardini 2008: 586; van Dommelen and Finocchi 2008.

¹¹⁴ van Dommelen and Finocchi 2008.

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Excavations of the Cave Settlement of Ani

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Abstract: Archaeological expedition organized by Shirak Regional Museum within the administrative boundaries of Haykadzor village, Shirak marz, Armenia, discovered a number of archaeological sites including settlements, burial grounds, a fortress, an altar, traces of an ancient road, etc. Excavations lasting about two years resulted in the collection and classification of the surface material and other finds from destroyed archaeological layers dating from the Stone to the Late Middle Ages. The most interesting of them was the discovery of a suburb of Ani, a cave settlement situated in front of the famous Horomos monastery.

Keywords: Middle Ages, Bagratid Kingdom, Ani, Horomos monastery, Haykadzor village, cave-settlement, earthquakes

The most interesting result of the excavations carried out in 2000-2001 by Shirak Regional Museum is the discovery of a Middle Age cave settlement in Haykadzor village. Being located between the city walls of Ani, the monastery of Horomos and the Triumphal Arch of Ani this cave settlement undoubtedly had been one of the suburbs of the capital city of Ani (Figure 1). In 2003 the archaeological team made exploratory excavations in various sections of Haykadzor to adjust the chronology and stratigraphy of separate sites and to clarify their sequence and interconnection.

Choice of the sectors for excavating was conditioned by a number of circumstances and scientific expediency. Three of the sites namely: that in the vicinity of the church of Grigor the Illuminator (Section 6), ancient settlement and necropolis (Section 3), the fortress (Section 2) and the area of the medieval settlement were left untouched because the cultural layers in the 3rd and 6th sections had been unearthed and the material discovered there was sufficient for dating the settlement.

As a result of land betterment works carried in the area adjoining the fortress (Section 2) in the middle of the past century the upper layer along with the remains of structures was totally destroyed. Section 4 being a settlement enclosed within the monastic complex of Horomos was the most promising from the scientific point of view as well as the best preserved.

Excavations were conducted on two sites – inside the village of Haykadzor (Section 5) and in the Akhuryan river gorge – in the caves facing the monastery of Horomos.

Excavations on Section 5 in the south of the village started on a hill edged by a ravine on the west and south, the entire surface of which was covered by fragments of earthenware characteristic of the Hellenistic period.

According to villagers the remains of some walls had been still preserved before the construction of the first houses in 1950s. Two exploration pits were laid there. The thickness of the cultural layer varied between 0.5 - 1.2m depending on the natural slope of the area. According to stratigraphic observation this section of the site consisted of two consecutive layers and two building horizons. The material uncovered dated from the 2nd to the 1st centuries BC. Later, in the 1st-2nd centuries AD this area was turned to a graveyard. The bottom layer of square 1 revealed a wattle and daub floor with a section of the wall masonry. In the 2nd layer of square 2 we unearthed a 5.5m long and 3.8m wide structure with two cromlechs respectively 2.25m and 3.8m in diameter flanking on its western side. The body was buried in sitting position but the skeleton fell on the back when the muscles decayed (Figure 2).

The materials unclosed on the Section 5 included stone and iron tools, fragments of flasks, hemispheric decorated bowls with red edges, ovens and kitchen ware, two small clay bird figurines resembling ducks.

Of special interest was the pedestal of a stela of the Artaxiad period found in square 2 (Figure 3) being the second similar find in Armenia (the first one was found from the ancient estate ('*dastakert*') of Benjamin that came to confirm the description by Moses of Khorene of the form of the Artaxiad period border stones and at the same time provided an opportunity of accurate dating. The excavation on this site revealed also a new form of the burial rite and ceremony for the given period.

The basic objective of the excavations conducted on the second site was revealing the principle of the cave settlement build-up, communications between the natural and handworked caves, their functional destination and chronological succession.

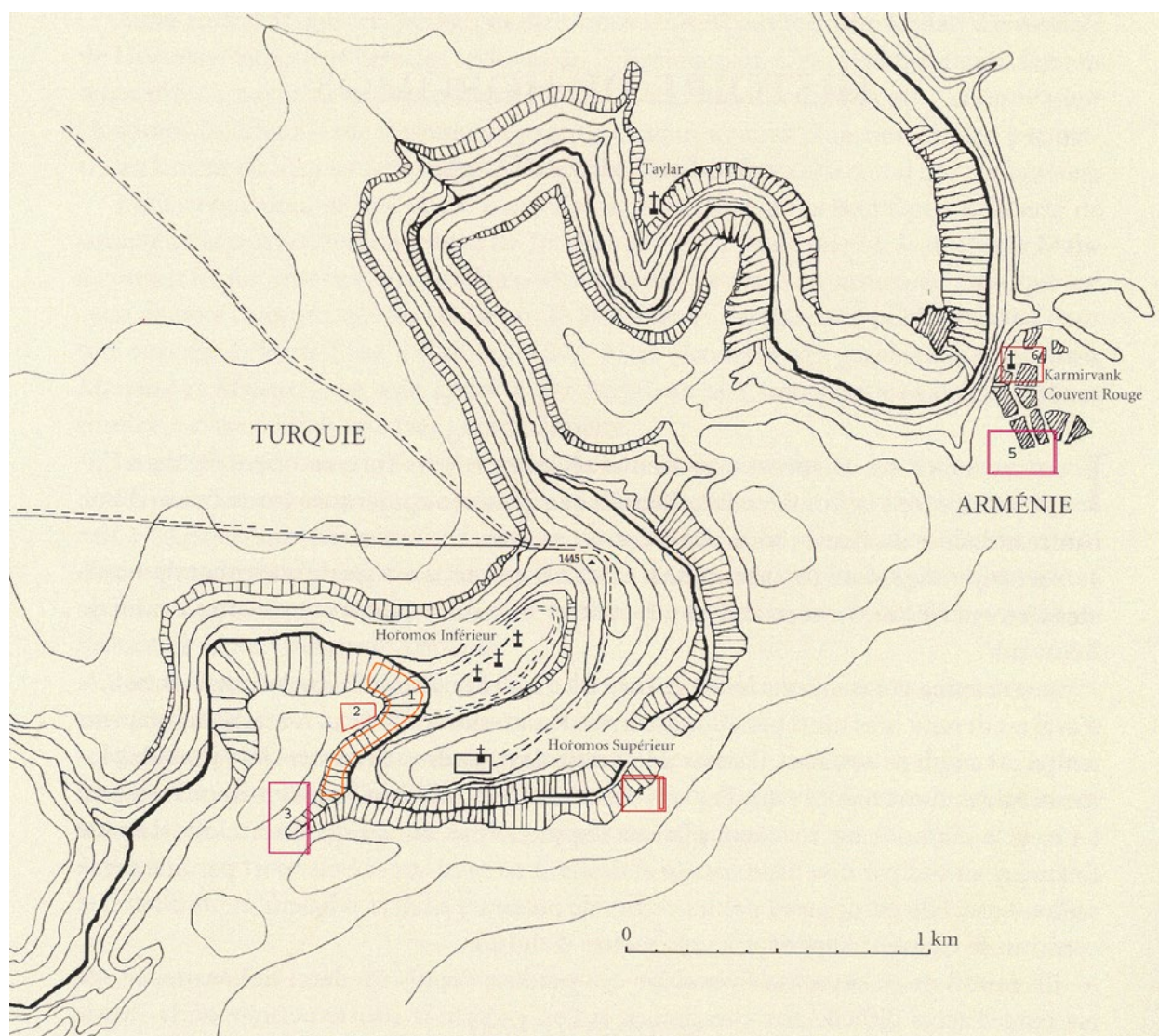


Figure 1

The geological structure of the Akhuryan river gorge in this area is represented by three hills sitting on a firm sandstone base, at that the first and the third hills have basalt layers, while the second one is interlaid by tuff, the entire surface of which is covered by 0.5-1m thick alluvial layer of obsidian and dacite (Figure 4).

The works firstly started in one of the artificial caves including also the natural cave beneath as well as the platform in its front and two caves on its left and right sides.

The artificial cave cut in the tuff layer in the form of an irregular rectangle has 13m width and about 6.5m depth. Height of the ceiling was about 3m. The walls bearing the traces of the sharp edge of the instrument contained several large and small niches of varying depth used certainly for economic purposes. An arched oven was cut in the opposite wall. There were

also small reach-through holes in the walls that might serve for hanging some objects (churn, covering for bread, cradle, etc.). In the central part just opposite the entrance there was a partition wall left for dividing the hall to two communicating rooms, each with a window. Its left side was thoroughly processed. Small windows cut in the façade as a narrow rectangle were gradually widening inside. The drainage system of the windows consisted of gradually stooping pads/grounds of varying sizes the last step reaching the floor.

There were the remains of two large and small *tonirs* (hearths) in the left room floor where we found a bronze ring, a chain, a medallion and an unnamed copper coin of the 11th century.

The excavations revealed the passage between the upper and lower caves (Plate 1) representing a manhole 70cm in perimeter that was cut just beside the entrance



Figure 2



Figure 3

to the handworked cave. It was gradually widening and irregularly rounded to the left and led to the upper section of the northern wall of the natural cave thus connecting both caves together. Besides serving as a passage the manhole had a function of heating. After using the 1st floor *tonirs* the warm air passed to the upper cave forming a heat shield from the cold air penetrating through the entrance.

The entrance was shut by a stone door, fixed to the threshold and lintel by means of dug-outs preserved on both sides of the entrance.

The first floor of this complex consisted of three communicating natural caves and if the thickness of the cultural layer in the artificial cave did not exceed 0.5m in the caves beneath it reached 2.3m.

In the first cave we found a chimney and two large and small *tonirs*. The floor was paved by large tuff slabs under which we found two more decayed *tonirs*. Outside of that cave we unearthed the stone masonry of a corridor connecting the cave with the outer world, which was later blocked by an inner wall.

The second central cave had a separate entrance in its eastern side later blocked by a wall in the course of further reconstructions. The findings here consisted of *tonirs* cut in the sandstone floor and a rectangular furnace. Among other finds there were drops of glass, small shapeless glass masses and fragments of rejected glass bracelets and beads.

The furnace could be probably used for manufacturing glass items though the absence of glass slag here leads to the conclusion that it has been rather a production using ready-made glass mass than glass making.

The third hall was a cattle-shed. It was carefully paved and divided to two almost equal parts by natural ledges in its western side.

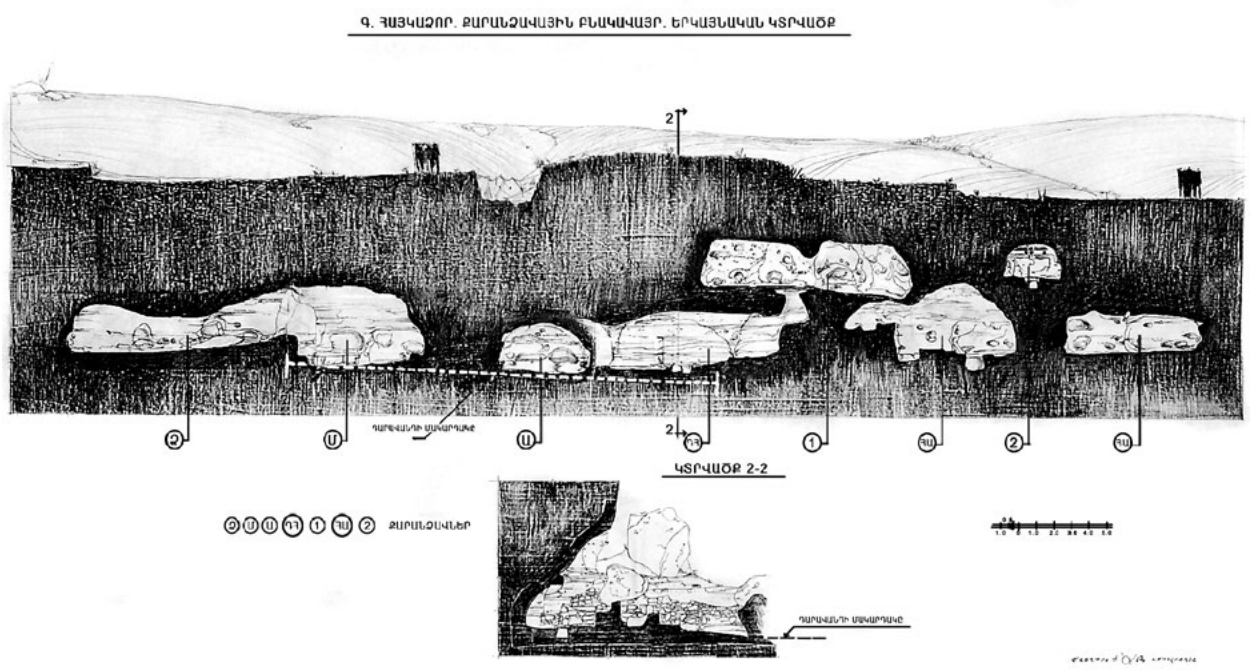


Plate 1

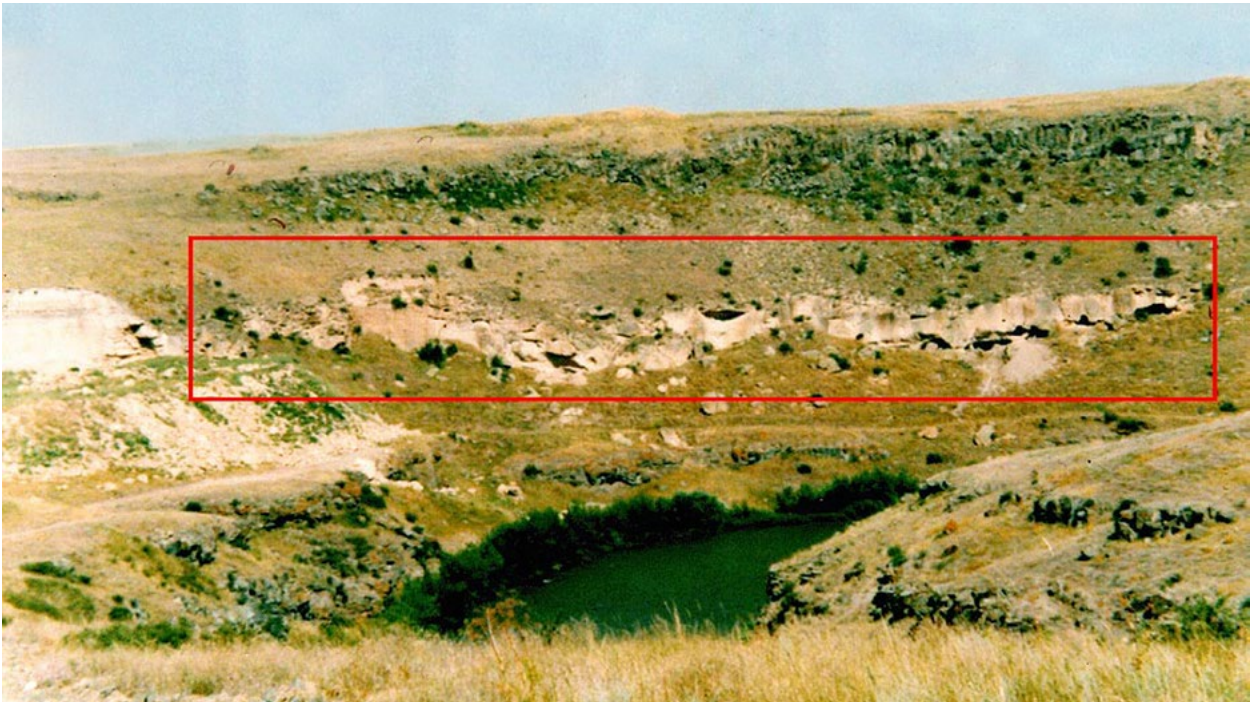


Figure 4



Figure 5

In the eastern side along the entire length of the cave there was a crib built by well dressed vertical slabs. The upper part of the crib slabs contained reach-through holes to tie the cattle. A similar smaller crib, probably for the calves, was found in the southern part of the western side, and on the northern side the sandstone was cut to form water troughs.

The last slab on the southern end of the large crib differed from the others both by size and quality. Although the shed was connected with the second cave, there should have been another entrance for cattle opening to the pad/ground. The wall behind the crib was formed by two huge tuff rocks fallen probably during some earthquake. They were not removed. Instead they were drafted and the hollow between the rocks was filled by masonry (Figure 5).

As a result of excavations on the first floor and the adjoining external platform (about 75m²) we uncovered six building horizons dating from the 9th to the 16th centuries.

After removing the walls of the later building from the platform along the 1st, 2nd, and 3rd caves we restored the initial relief. The horizontal platform was planished through drafting the sandstone when the caves were

settled. There we unearthed the walls of an earlier period, *tonirs*, three granaries and a furnace (Plate 2). Remains of the earlier walls stretching from the caves to the river encompassed three granaries along the caves. The pad should be fully roofed otherwise the *tonirs*, granaries and the corridor leading to the 1st and 2nd caves would occur under the open sky. This assumption is proved by a line of hollows perforated in the tuff façade of the caves where the beams for roofing could be fastened. The pad stretched for another 1.5-2m after the granaries.

The excavations of the pad along the caves revealed the initial structure and the functions of the separate parts of this complex. In our opinion the artificial cave 1 was assigned for living while the 1st, 2nd, and 3rd caves as well as the roofed platform below served for economic and production purposes.

Based on the climatic conditions of Shirak region we may assume that the artificial cave was mainly used in winter but when the weather was warm the 1st and 2nd caves and the roofed platform served both for living and production.

Two large and small *tonirs* unclosed in the artificial cave speak in favour of this hypothesis. Excavations

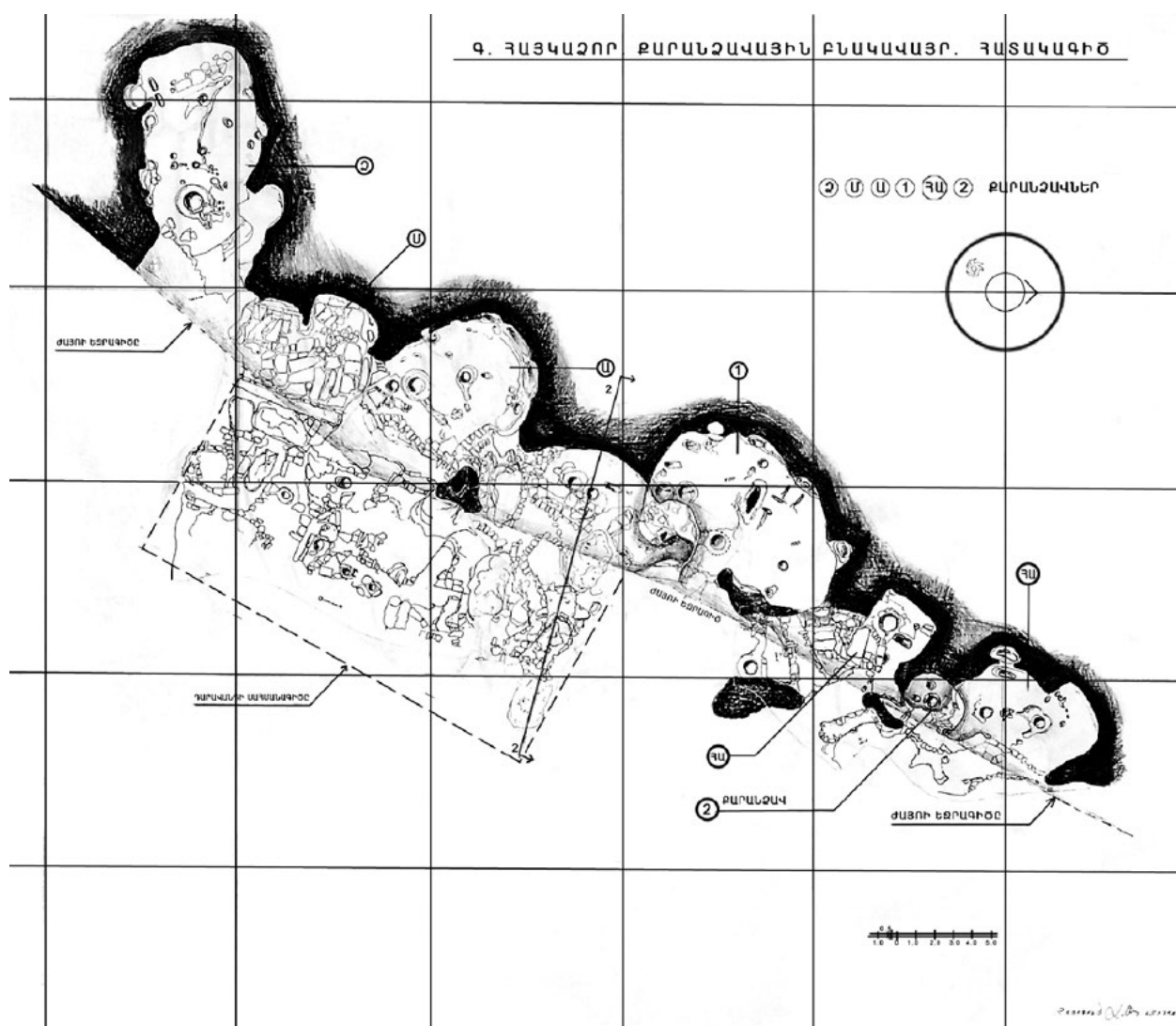


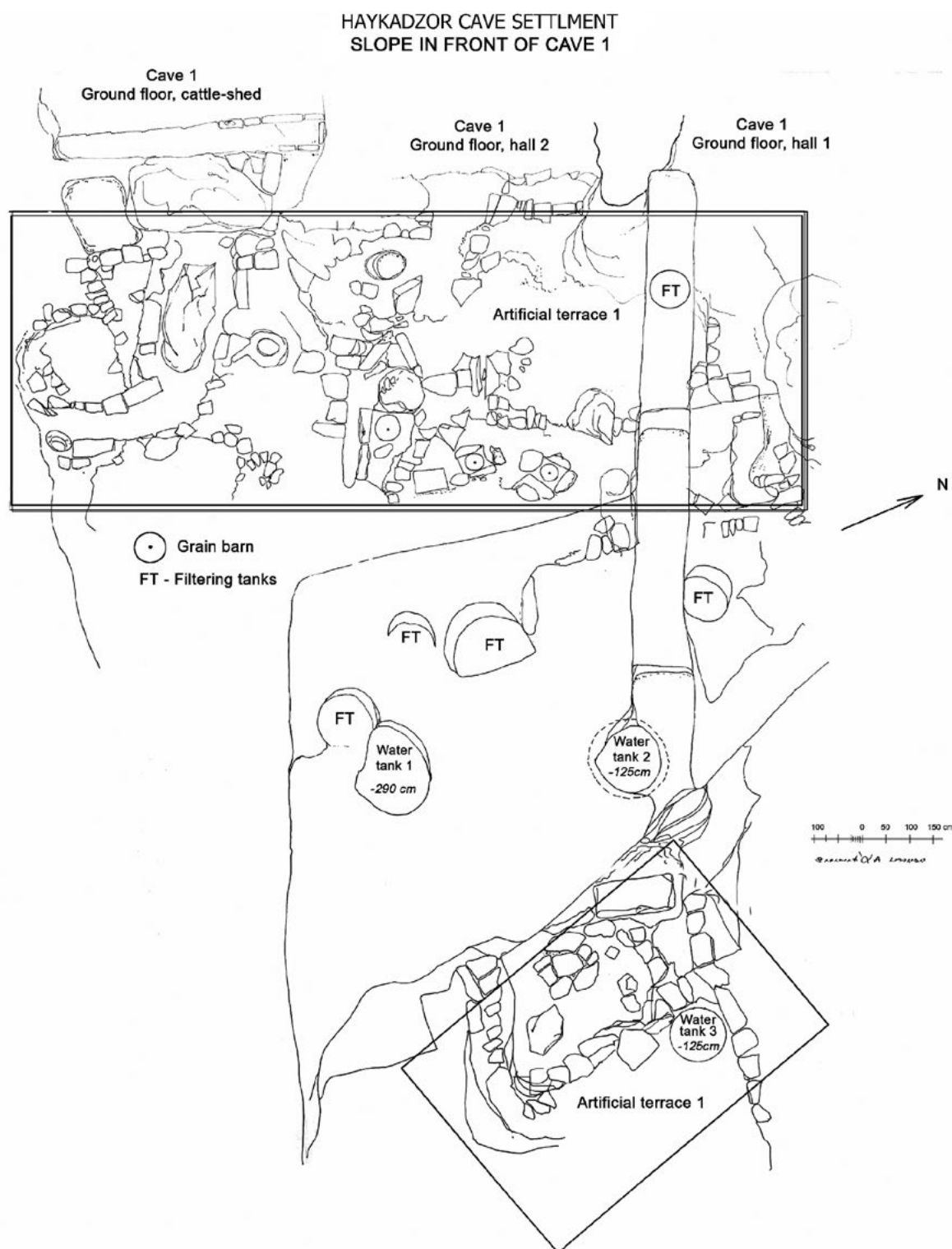
Plate 2

showed that the 1st and 2nd caves were used for daily purposes and baking bread while the 3rd cave served as a shed. Judging from the furnace, granaries and other materials found here the roofed platform served for production, storage and other household purposes. Of special interest is the structure of the granaries representing truncated cones. The first one was 1.9m deep with the diameter of the base about 2m, of the mouth – 0.55m; the second and third granaries were respectively: 1.35m × 1.4m × 0.5m; and 1.6m × 2.15m × 0.57m. The 2nd and 3rd granaries were communicating by means of a reach-through aperture, from which the wheat poured from the relatively large granary to the smaller one thus filling in the deficit, i.e. there was no need of frequent opening the larger granary. The largest granary that stood a little further might possibly serve for storing some other grain culture, e.g. barley. The early origin of these granaries is proved by the fact that the surface of a huge tuff fracture fallen on the third

granary as a result of rock slide was later dressed and holes were drilled to tie the ropes. We found three jugs of different sizes in that granary.

To find the old road leading from the river to the caves, specifically to cave complex 1 on elevation we concentrated further works on the slope beneath the first horizontal artificial platform of the cave complex 1. The natural acclivity of the slope is about 73°. It was decided to reconstruct the initial outlook of the slope through removing the entire soil up to the sandstone.

At about 8 m below the edge of the first artificial platform along the caves we found another smooth horizontal platform with the remains of two structures of different periods. On the slope between the two artificial platforms we unclosed a water collection system consisting of pits in the form of truncated cones of various sizes, circular and crescent-shaped



purification basins and a cascade of falling water. The first water collection pit was situated 5m below the first artificial platform near the second cave. Three crescent-shaped purification basins of different sizes were cut in the sandstone of the slope between the first platform and the first pit. Their disposition showed that

the first pit was assigned for collecting precipitation water (Plate 3).

The cascade of the falling water began at the external natural ledge of the sandstone rock dividing the first and the second chambers of the first floor cave 1. It looked

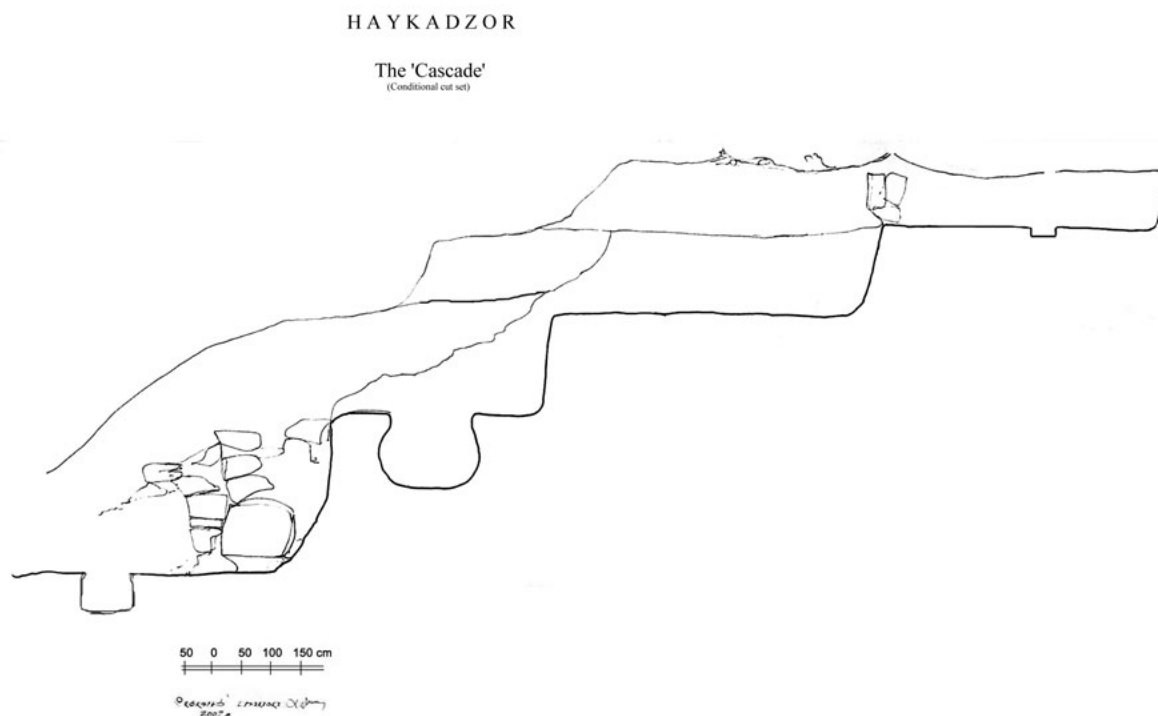


Plate 4

like a rectangle dressed at the height of approximately 2m and width 1.1m that continued horizontally for 4.8m (Plate 4).

At the distance of 1.9m from the first vertical cut there was a 0.5m deep purification basin having 1m in diameter in the cascade. The first step of the cascade ended at 1.75m high vertical cut of the sandstone, then continued for other 5.5m and ended at the similar cut with the height of 1.85m. The length of the third step where the second conic water collection pit was cut made 3.4m. The diameter of the pit's mouth was 1.4m and its depth was 1.3m. Initially it had been larger as proved by a round neck 0.95m in diameter cut from one piece of stone and a stone lid 0.45m in diameter – both found inside the pit. Continuing after the pit for another 0.5m the horizontal surface vertically descended for 2.6m to the second paved ground below where we found the second water collection basin (diameter - 0.9m, depth - 1.3m) at the distance of 3.6m from the vertical cut (Plate 5).

The second ground had been paved twice. The distance between the pavement layers was 20cm. In the initial phase of settling in caves and constructing the water collection system there was a structure, the wall of which built of well dressed stone was preserved on the northern side of the second pad. The level of its bedding correlated with the lower pavement.

At the same time the works continued on the site adjoining cave 1 from the north. At first we unearthed the section between caves 1 and 2. The thickness of the earth here reached the edge of the second window of cave 1 joining the hollows visible on the rock. As we had similar hollows for roofing from the preceding excavations we expected to have the same picture here. After removing the first layer we saw that the hollows were made on the cave wall in this section at the distance of 20-30cm from each other by a little arc line and corresponded to the line of hollows on a huge fracture of the rock that was torn apart from the bedrock. It was an original solution for reusing partially decayed caves. During the reconstruction the area between the rocks was used for fastening the beams of the cover. Here we unclosed two walls reconstructed in the 11th century. On the floor in front of the rectangular chimney built into the second wall we found two Byzantine copper coins of the 11th century. Excavated was also the conic artificial cave 2.5m in diameter neighbouring the first cave and representing a dome-shaped hall (Figure 6).

Probably it served as a chapel or church already in the Early Middle Ages, preceding the Horomos monastery. This is testified not only by arch-belt adorning the walls but also by crosses with equal wings characteristic of the 4th-5th c. AD that were engraved over the arch-belt. Based on it the chapel was dated by the 4th-5th c. However more precise dating would be possible if the

H A Y K A D Z O R

The platform in front of Cave 5

(Conditional cut set)

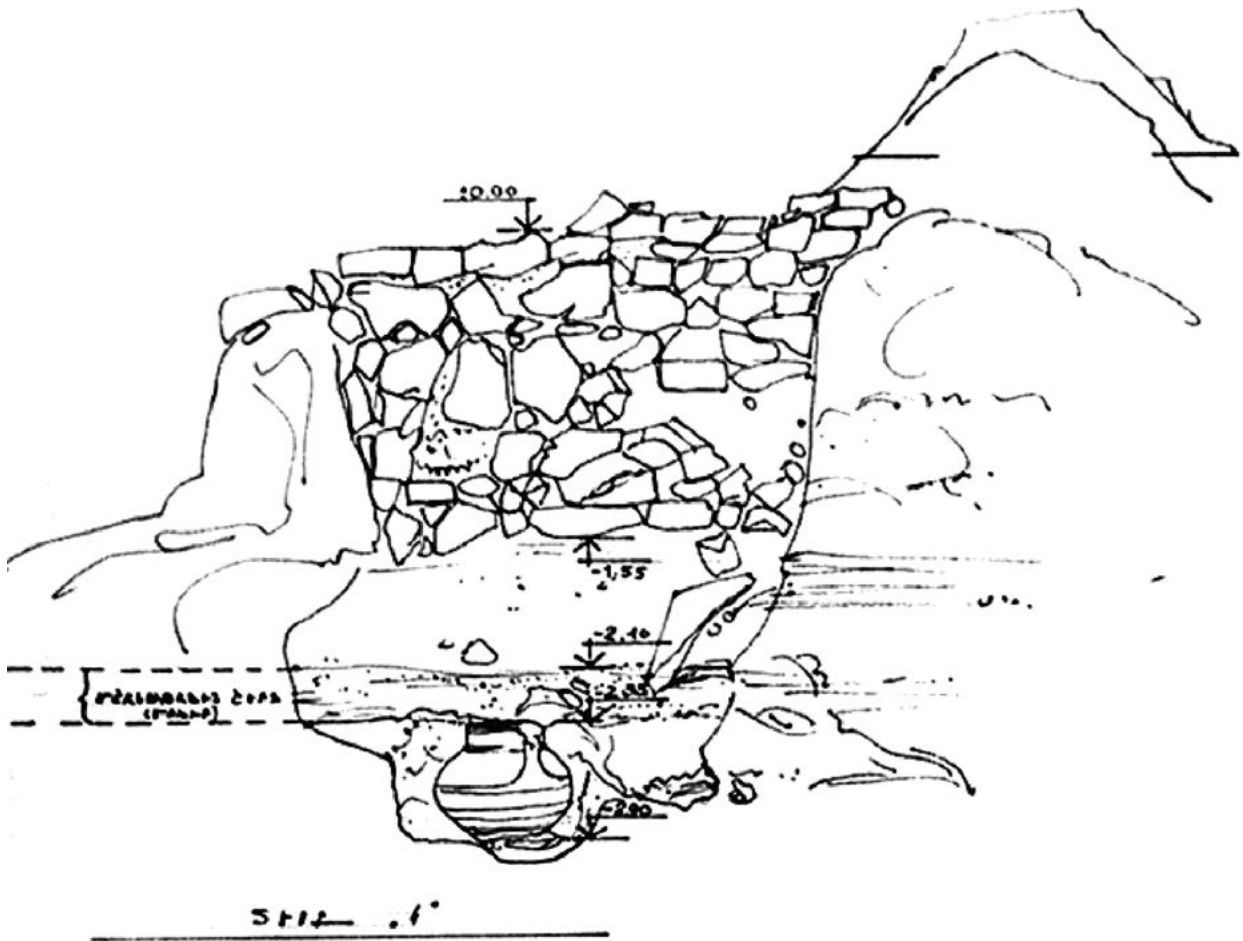


Plate 5

symbols enclosed into a spiral engraved on the ceiling were deciphered. Later a *tonir* was cut in floor of this cave-chapel. It replaced a larger *tonir*, the fragments of which had been later used for fastening a smaller one.

In the section between the fraction of the rock, the cave, the chapel and the cave to its right we unclosed another adjacent cave with an arched entrance (Cave 5), which was divided by a niche to two parts. Its northern side was destroyed. There were numerous niches and ovens on the floor and on the walls, as well as clay masses piled in the corner. A well drafted pit with two holes dug in the stone of the floor led to the conclusion that initially it had been a workshop. The pit was partially buried

under the walls of later reconstructions and huge fallen rocks. The walls in this cave represent five building horizons. The finds consisting mainly of ceramic and metal artefacts are dated from the 10th-14th centuries.

To join up both caves we removed the huge fractures of basalt and tuff closing the entrance to other cave to the right of the chapel and unclosed niches in the walls, ovens, *tonirs* and granaries on the floors dating from the 10th-11th centuries. Inside the *tonir* we found a coin minted in the city of Ani.

Excavations of the platform in front of those caves revealed the walls of various building horizons. There



Figure 6

were several phases of reconstruction due to the rock slides on the platform caused by the earthquakes.

Being unable to remove the rocks they cut some parts and drafted the rocks turning them to a floor or wall, or rebuilt the pad with new structures. Under the debris left from the last earthquake on this platform we found a woman-shaped salt-cellar of the 13th-14th centuries (Figure 8) and a little below – at the foundation of a wall still standing on another platform in the depth of 0.6m we found a wholesome pithos (*karas*) dug in the floor and fragments of many other pithoi of the 11th-12th centuries (Plate 5).

Most probably the caves were first inhabited in the time of the reign of the Armenian Bagratid King Abbas Bagratuni (AD 929-953), in the first half of the 10th century when the church of St. Minas was erected. Later when the main structures of the Horomos monastery had been built and the monastery turned to a large economic and cultural centre this suburb of Ani was fully established.

The picture of disastrous landslides and succeeding reconstructions revealed in the caves and the adjoining



Figure 7

platform by earlier excavations showed that huge irregular basalt fractures on the first platform were on the same level, i.e. fell simultaneously from another hill hanging over the caves in the gorge. While falling those immense rocks broke off the tuff layer in the frontal side of the second hill (with the caves). These simultaneous landslides might happen as a result of the catastrophic earthquake of the 12th century.

Excavations of the slope and the second artificial platform revealed the same sight of destruction. The large basin of the cascade of falling water failed as a result of a wide crack in the sandstone. The excavations on the northern side of the second platform located 8m below the first one revealed three natural caves that showed no outward signs of existence. The central cave was communicating with a large cave to the left, which was situated just under the first pit of the cascade (Figure 7).

Basalt rocks fallen on the second platform from the higher hill destroyed the upper part of the water pit breaking its stone mouth and the lid to pieces. As the inhabitants did not remove the pieces from the pit and, moreover, built a wall on the level of the platform and the first horizontal step of the cascade we concluded that it was not functioning already. The earthquake ruined the earlier structure on the second platform. Later another structure with irregular masonry was built on huge basalt rocks fallen on the platform. The second water collection basin of the cascade waterfall was turned to a junkyard.

Most interesting among many questions arising in connection with the water system is that it has been built a few dozen meters away of the river Akhuryan. What for and was there any necessity of building? The dislocation of the crescent-shaped purification basins of the first water collection pit hints that collected there should be precipitation water flowing from the

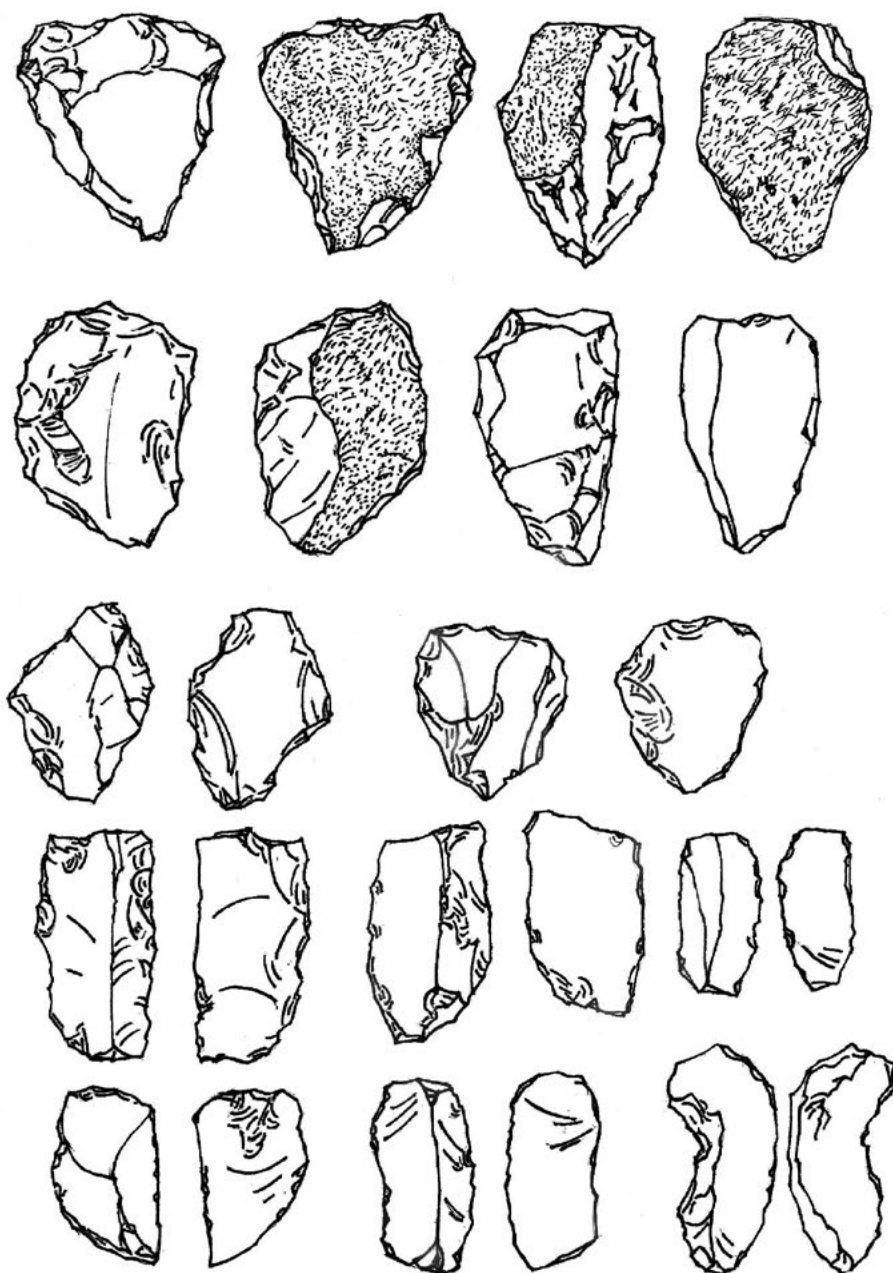


Plate 6

first platform and the slope. Meanwhile the cascade beginning at the external ledge of the sandstone dividing the first and second chambers could have sense only if there were a stream flowing by its course from above.

During the excavations we unclosed stone, iron, bronze and bone instruments, large number of earthenware, coins and other materials. The stone items were represented by spindle heads, plummets, tuff lamp, etc. Artefacts of dacite, flint and obsidian dating from the Stone Age constituted a separate group (Plates 6-7).

Metal items consisted of the knives of various sizes, bridles, horseshoes, bronze thimble and a fragment of

a bracelet. Ceramics was represented both by kitchen ware and red varnished, decorated or by glazed vessels. A separate group was made by the fragments of the embossed pithoi of Ani belonging to the 11th-13th centuries (Plate 8).¹

Of special interest among the finds was a clay artefact in the shape of a horseshoe leaned in vertical position against the hole of one of the first floor *tonirs*. It looked like a woman bent forward with stretched arms. Its connection with the cult is obvious (Plate 9). Fragments of similar artefacts had been also unclosed nearby of the other *tonirs*.²

¹ Yeganyan 2003: 92.

² Yeganyan 2008: 97.

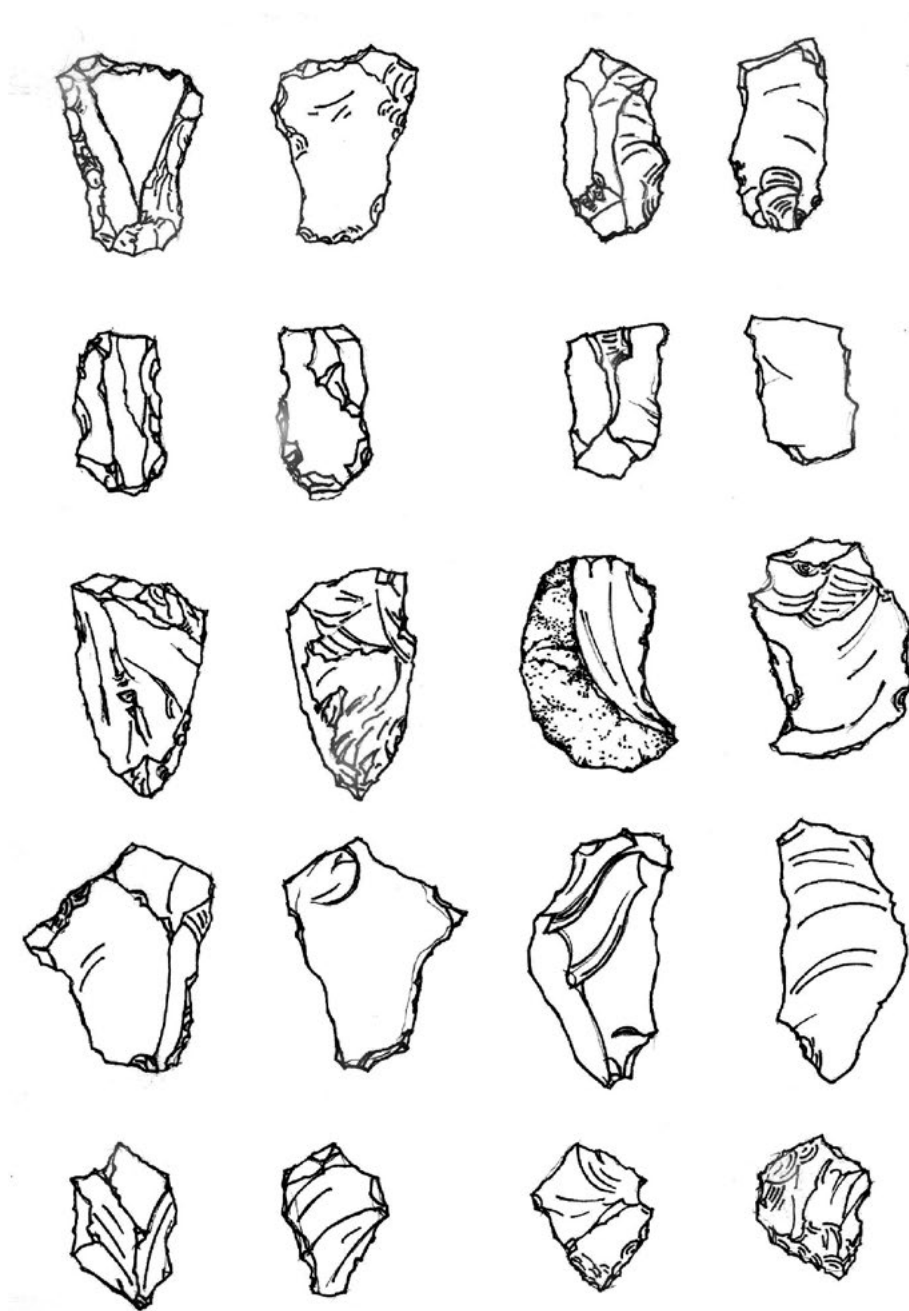


Plate 7

A unique find of medieval salt-cellar, which is still the only sample of that period found in Armenia comes to prove the primordial Armenian origin of the 19th-20th century female-shaped salt-cellars. It is made of light brown sandy clay (height – 38cm, diameter of the waist – 25.5cm, base – 11.5cm). The body is gradually narrowing by both sides to form a slim neck with a thin rim and a shallow bowl-lamp sitting on it. It has two bow-shaped handles, one of them broken, and a round opening at its widest part (fertility organ). The superimposed decoration by its both sides ending under the lamp depicted six people in a round dance. All of them but the smallest had bow-like or horseshoe shaped details resembling a nimbus over their heads.

On different parts of the salt-cellar – on the handle and under the neck there were several laid-on snake twists (Figure 8).

Glass production is represented by vessels, beads and fragments of bracelets of various forms and colours. In situ production of the glass artefacts is testified by the samples of rejected items, poorly baked beads, fragments of bracelets, drops and shapeless pieces of glass.

Coins unearthed both in the caves and in the adjoining platforms consisted mainly of unnamed Byzantine folles and Mongol or Arab silver and copper coins. Two

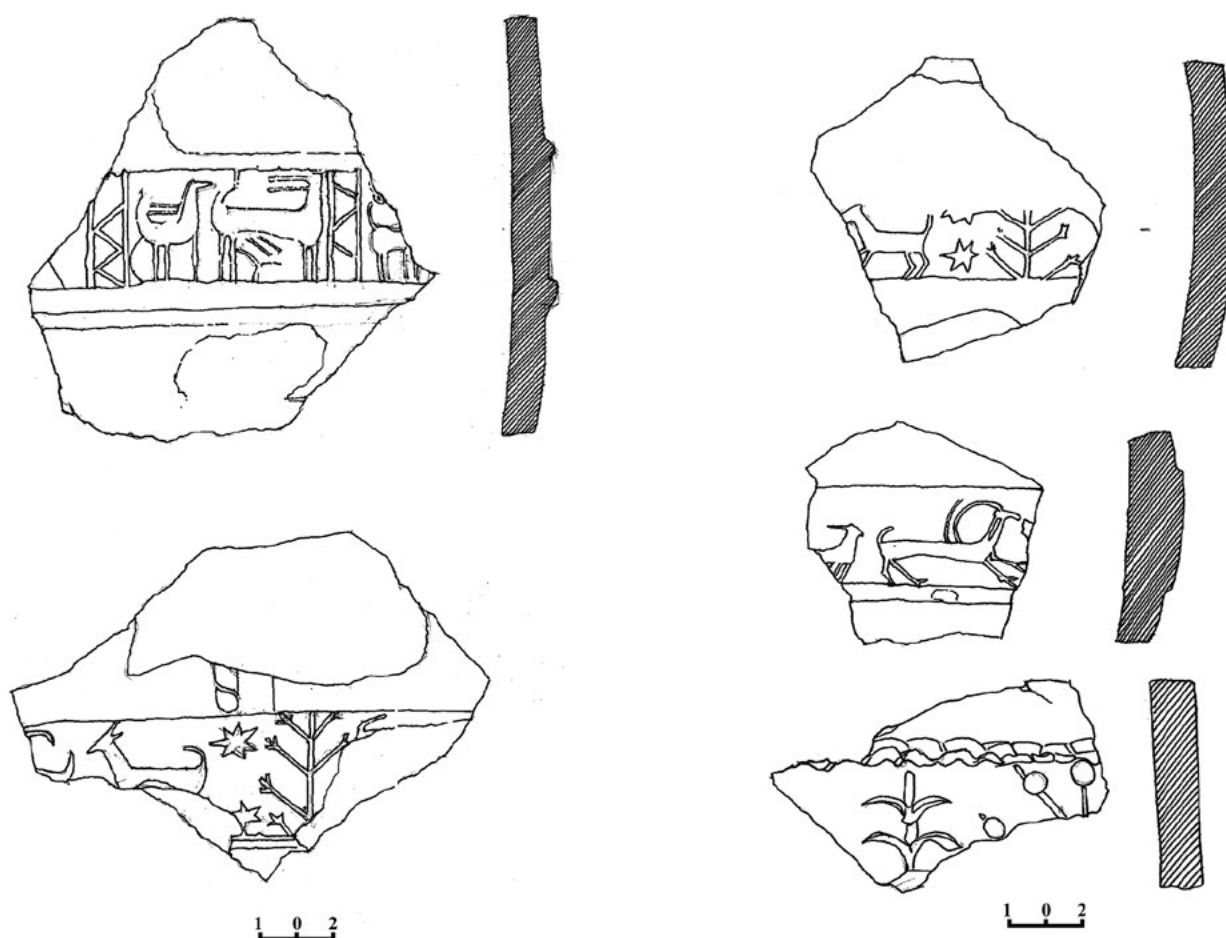


Plate 8

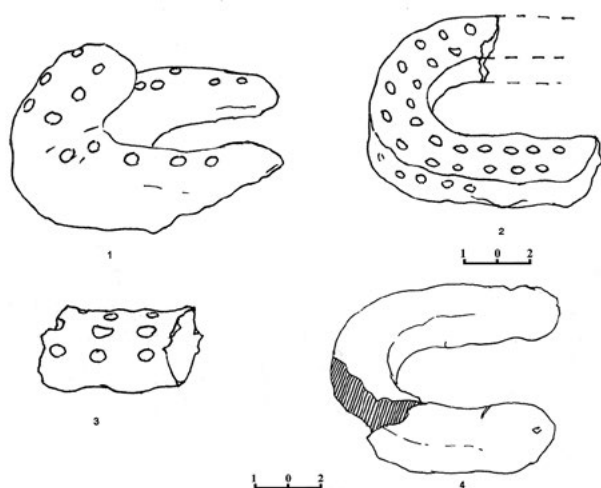


Plate 9

of the folles had an Arabic legend 'lillah' on the obverse characteristic of one of the Artuqid Atabegs of Hisn Kayfa (Hasankeyf) (Plate 10.6).

Most important among such finds were two copper coins of Ani coinage issued in 1340s, in the reign of the Hulaguid Suleiman Khan (Figure 9).

Of greatest interest was also a treasure consisting of nine coins, which were oxidized and stuck on each other as if they had long been kept in a narrow purse (Figure 10).

Eight coins of the nine had been unnamed Byzantine folles of the 11th century (Plate 10.2-9) and one of them was a Byzantine copper coin (Plate 10.1) of the 7th century, which had long been in circulation.³

The chronological correspondence of the coins found at the lowest levels of the first and second platforms

³ I am grateful to numismatist Armine Zohrabyan, History Museum of Armenia, who identified the coins.



Figure 8



Figure 9



Figure 10

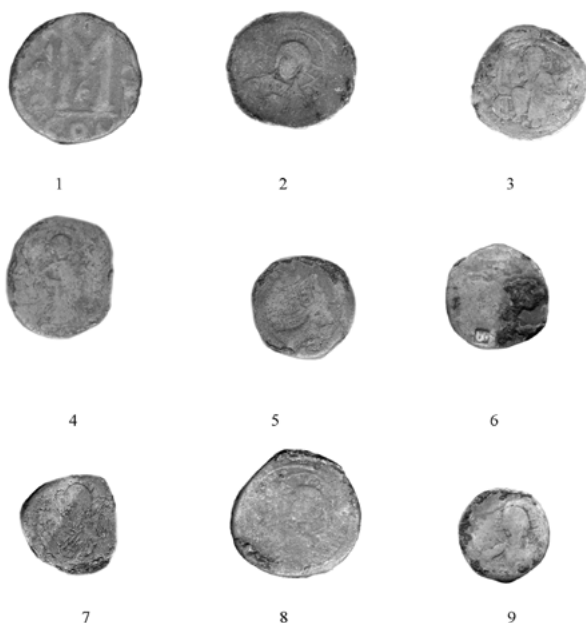


Plate 10

shows the simultaneity of the settling and build up of this area in the 10th -12th centuries.

The excavations of the cave settlement of Ani confirmed that chronologically the establishment and rise of the suburb went in parallel with the erection and rise of the Horomos monastery. There is no doubt that the cave settlement destroyed as a result of a strong earthquake at the end of the 12th century was later reconstructed and the life continued within the general context of the vital activity in Ani and Horomos monastery.

Based on material finds the stratigraphic dating of the reconstructed building horizons leads to conclusion that the last strong rock slide was an aftermath of the disastrous 1319 earthquake of Ani, after which this suburb fell into decay.

The traces of major rockslides and further reconstructions unearthed by excavations revealed the catastrophic aftermaths of all three strongest earthquakes in Ani though the general picture showed that the life in Ani or at least in its suburbs somehow continued until the Late Middle Ages.

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The Emergence of Burial Mound Ritual in the Caucasus, the 5th-4th Millennium BC (Common Aspects of the Problem)

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Abstract: The article is devoted to the emergence of burial mound ritual in the North Caucasus of the 5th-4th mill. BC. The ancient burial mounds appeared in the 5th century BC in the valleys of the rivers Terek and Kuban. Their carriers were tribes of the Proto-Pit grave culture which have begun to use the barrow ritual in the South Eastern Europe in this period. Forms of burial structures of Neolithic barrows were as pits and catacombs. The symbolism of funerary rites of ancient burial mounds reflects the prestige of the tools of woodworking, magic and hunting (bow and arrow). Particularly revealing was the tradition of inserting the plates of flint into the palm of the deceased person. Traditions of ancient kurgans were dealt with members of egalitarian societies, where there is a gradation of graves according to sex, age and prestige. The symbolism of military affairs (maces, axes of stone) was not detected in the ancient mounds.

The kurgan burial practice of the Maikop-Novosvobodnaya community was formed in the early IV century BC. It has various traditions associated with the construction of kurgans of earth and stone. Burial structures reflect the existence of megalithic and earth tradition. The tradition of burial practices of the Maikop-Novosvobodnaya community was very different from the traditions of the preceding periods of the Chalcolithic. As a heritage of the preceding era can be considered the fact of the erection of a mound over the burial, the use of ochre, and the forms of burial in catacombs. Burial traditions of the Maikop-Novosvobodnaya community reflect a stratified, elite military society whom the symbolism of the tools has not lost its value. The formation of the early burial traditions of the Maikop culture, apparently, was under a separate tribal of the culture Leilatepe and early tribes of Maikop culture, inheriting a tradition of local Chalcolithic period. It was not came from Near East as carriers of ceramic of the Maikop culture

Keywords: The Caucasus, chalcolithic, kurgan burial ritual, cromlech, weapons, implements, chronology

Kurgan burial ritual appeared in the Caucasus and South Eastern Europe in the 5th millennium BC mainly in the second half.¹ Its bearers were the tribes of the chalcolithic Proto-Yamnaya culture, which spread among the steppe regions from the Volga to the Dniester and from the border of forest-steppe to the Northern Caucasus. Economic-cultural type of people the Proto-Pit grave culture was associated with a mobile lifestyle, pasturing, hunting and gathering. Long cultural relations and gift/exchange of prestige values have been widely developed at this time, including cooper things and ornaments.

The oldest kurgans in the Ciscaucasia (in Russian 'Предкавказье') are mainly low (up to 1m in height) earthen mound at the centre is buried in a pit, or a catacomb. The deceased man was placed in the centre of the burial space in position crouched on the back with raised knees and with the feet placed on the ground flat. Feet, skull hands liberally sprinkled with ochre. The grave had stable orientation from West to East. The deceased person was laid the crown of their heads to the East, so that his face was turned toward the West where, presumably, was 'land of ancestors' or the 'Other World'. The inventory included tools: stone

adzes, knife-like plate. Knife-like plate was inserted into a palm of a deceased person or it was put near the hand. Also a stone adze was located near a hand. This tradition of buried practices is called specifically as concrete tools tradition (Figure 1.1-6).²

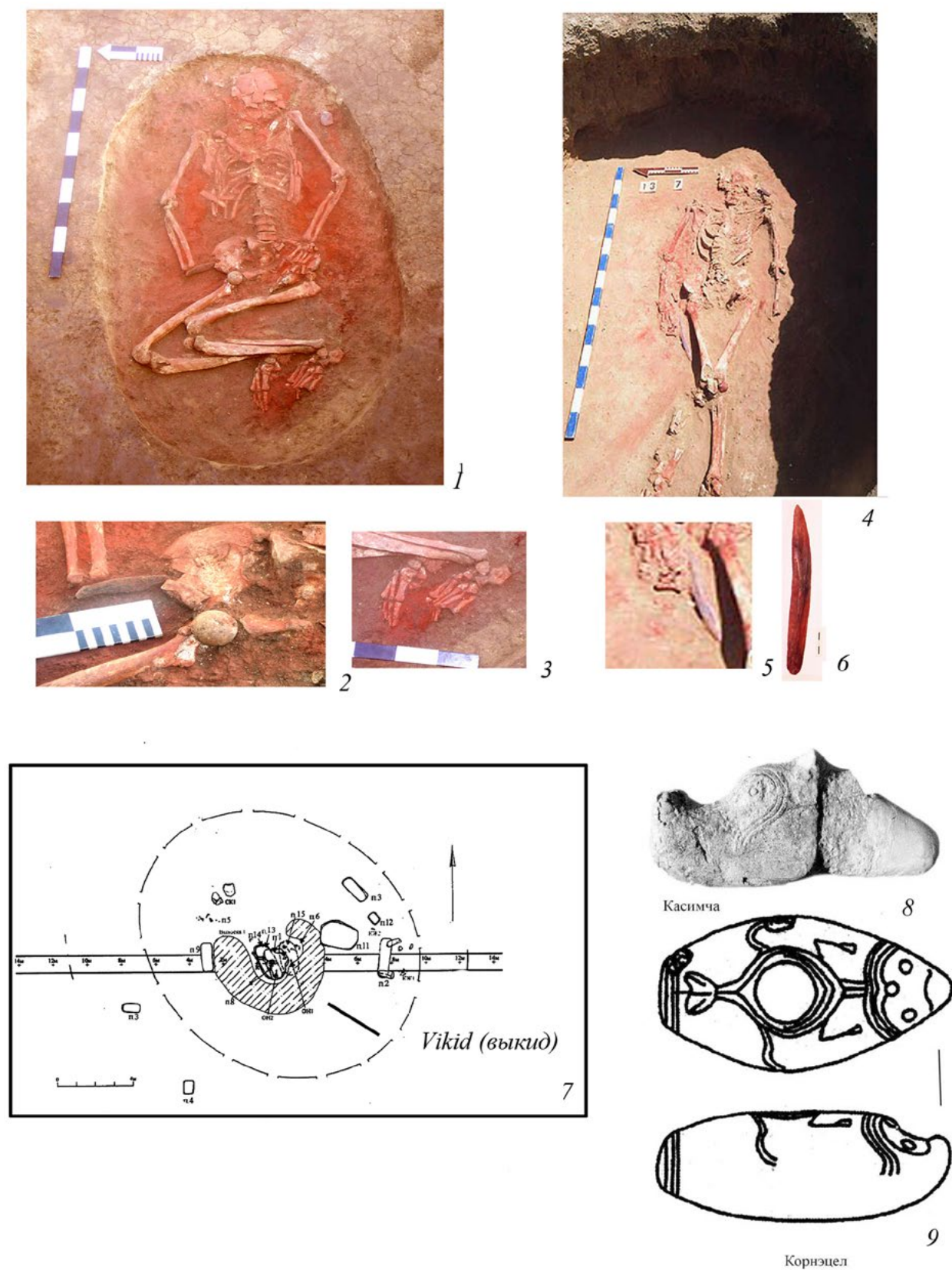
Forms of burials in ancient kurgans were associated mainly with pits, and less frequently with the catacombs. The catacomb or 'podboi', as a form of burial practices, is of the convergent emergence, due to the specific appearances a mythology of death from different tribes and peoples. An earth dug out of a grave (the so called 'vikid') was put around a pit as special layer of yellow native soil some time (Figure 1.7).

Specific set of equipment and its symbolism in ancient burial under kurgan has much in common with complexes without kurgans of the same period, which are known as the burials with ochre laid in crouched position on the back. The area of such monuments spread over the region of the Carpathians and the Black sea steppe of Thrace.

Kurgans rites were not universal phenomenon of that time. It is associated with burials of adult men and

¹ Korenevskiy 2012a: 63-64.

² Korenevskiy 2009a: 28-39.



women. As a rule, grave under the kurgan was one, rarely two.

The symbolism of the sets associated with the position in the grave of knife-like plate, as a tool for cutting meat and the involvement of a person to the distribution of the always scarce meat product. Further there were stone adzes, as the signs of woodworking, tips of arrows from a big bow. Worrier carried arrows in his hand. It was a universal tool of big game hunting and battle at a long distance. Tops of sceptres in the form of a head onager or kulan and snub-nosed beast with fantastic outlines of the head (Figure 1.8) were objects for worship. In some cases, there were similar like boar's head. Engraving of the body of such a beast on a stone axe from Romania (Corneţel) allows us to say that it was a magical beast in the form of a three-eyed dragon with the legs of a frog and a Dolphin tail (Figure 1.9).³

The weapons for hand-to-hand combat at close range (the tops of the maces, stone axes drilled) in the ancient kurgan were not found, although there are information from cemeteries of the Mariupol type of earlier time.⁴

There are about 40 ancient burial mounds in Ciscaucasia with the traditional position of the buried person in pose crouched on the back. So it's once white spot in the history of ancient burial mounds can now be read in conjunction with the Don – Volga region as one of the main zones of distribution of these monuments. The carriers of ancient burial mounds here also adhered to the rule provisions kindred to the grave, in position crouched on the back, but to this rule there are exceptions.

Local distinctiveness differs from Eneolithic burial equipment from the river Sunzha in Samashki. One of them is k.3 g.43 (Figure 2.1-4).⁵ The man buried in it was lying in a crouched position on his left side, left arm extended, the right bent at the elbow, the wrist is at an angle to the radius and ulna bones. The head of the deceased person was oriented to the South-East. The design resembles the burial chamber of the catacombs. In the burial complex consisted of a long knife-like plate, silicon chip, and a small copper adze length 5cm, width 2cm, quite unlike the products of the Maikop culture. A knife-like plate and the adze lies on the lump of ochre in front of chest of the deceased person. Burial 43 was included in the main group of burials in this mound, covered with embankment 1.

Two other burials under kurgan 1 got numbers 23 and 44. Burial 23 was perfect in the catacomb situation of the deceased in position crouched on the back. Form

of his pits not preserved. In burial 44 skeleton lay on the left side crouched, left arm stretched out in front of the body, the right bent at the elbow, the wrist is naturally drastically deployed at right angles to the radius and ulna bones. Discoveries made two of the stone behind. A group of these burials can be dated to the era predicable period or early Maikop time, as embankment 2 was related with Grave 8, a complex which included a bronze ring with divergent, the so-called protopsalij (ring into a nose of a bull) dated back to late period of the Maikop culture.⁶

A position of the deceased crouched on side with one arm bent at the elbow, and the other outstretched in front of the torso will be in the future one of the characteristic positions for burial tradition of the Dolinsky variant of the Maikop-Novosvobodnaya community⁷ which had local roots.

Objects of social prestige in Predmaikop period could serve plate copper bangles, beads of paste, pendants from the Fang of a wild boar, bone sticks. One of the burials with bronze bracelet was found near v. Chernoyarskaya in Mozdok steppes (Kurgan 2 burial 2, Figure 2.5-10).⁸

Buried man lay on his back writhed in the catacomb. It was oriented head to the South. All burial was strewn with ochre. In the neck and chest of the deceased person were found copper beads (143 pieces), paste beads, a flint arrowhead, and a bone of the pectoral from the Fang of a wild boar. On his left arm below the elbow was a copper bracelet with a diameter of 8cm of loose plates 2mm thick and 2cm wide. The bracelet was calling each other the ends. The bracelet was made of pure copper.

This is the second case of the copper bracelet finds in burials of the Chalcolithic Pre-Maikop period in Caucasus. The first case is associated with burial 3 of kurgan 1 at v. Steblitskij. It was recorded multiturn round bracelet that is typical of jewellery of this category in the Danube Chalcolithic and well represented in the burials of Jurgiuleshti g. 4 dated back to the time of Trypillia BI 4700-43200/4200 BC.⁹

The analogy of the find in graves of v. Chernoyarskiy are bracelets made of copper strip of rectangular cross section bent into one turn with the setting ends. They are considered by I. V. Manzura and T. A. Orlova as the first variant of the third type copper bracelets of the Eneolithic period. Such jewellery is typical for the early Eneolithic cultures of the Danube (Tisza culture). They were worn on the arms above the elbow, as you can tell

³ Korenevskiy 2008.

⁴ Korenevskiy 2009b.

⁵ Korenevskiy and Burkov 2014.

⁶ Korenevskiy and Burkov 2014: 75-77, Figure 10, 2-5.

⁷ Korenevskiy 2004: 54-57.

⁸ Korenevskiy and Gabuev 2014.

⁹ Govedariča 2004; Haheu and Kurciatov 1993; Korenevskiy 2012a; Videiko 2003.

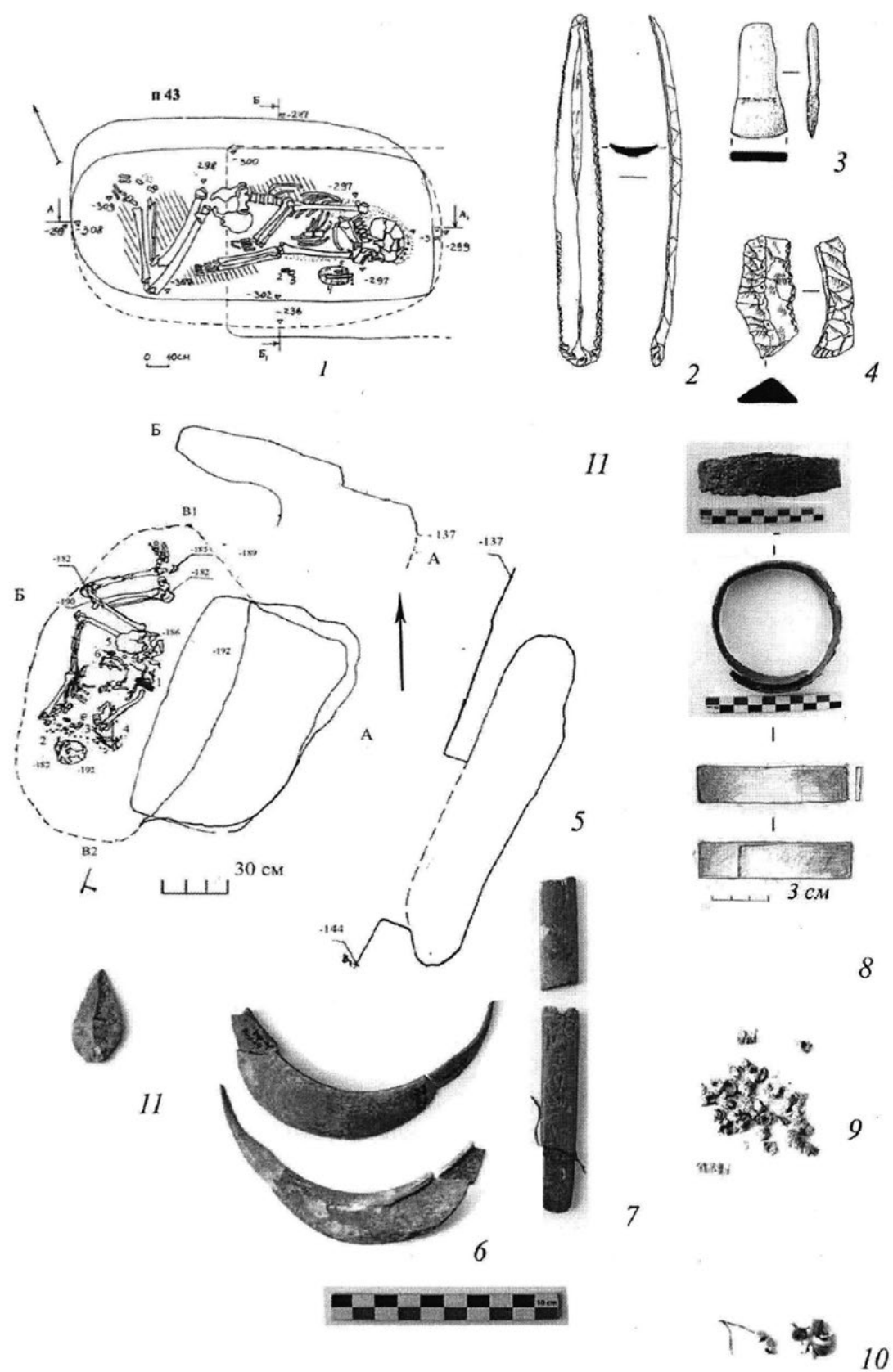


Figure 2. Burial with things of the Chalcokithic period.
1-4: Samashki k.3 g. 43 (after Korenevskiy and Burkov 2014); 5-11: Chernoyarskaya k. 2, g. 2 (after Korenevskiy and Gabuev 2014).

from the images on the statues of seated goddesses.¹⁰ Small paste beads are not less interesting analogy. They are associated with burial 3 of mound 1 early Psekupskiy variant in Kudahurt cemetery.¹¹

The oldest example of human sacrifice at burials in the barrow man of the Proto-Pit grave culture was recorded in kurgan 7 at v. Komarov. In another kurgan 2, probably a sacrificial feast (pots) was detected. The wreckage vessels are reminiscent of ceramics of the Maikop culture.¹² This raises the question that it is hard to answer, as there are several possible explanations for this situation. The first variant is the vessels date back to the times of Trypillia BI, refers to the complex of the Chalkolithic era, but this is unlikely, because for the Maikop-Novosvobodnaya community unknown date of Trypillia BI.

The second possible explanation assumes that we are interested in the burial mound dates back to the beginning of the spread of the Maikop-Novosvobodnaya community in the surrounding area.

The formation of the Maikop-Novosvobodnaya community relates to the first quarter of the 4th millennium BC. Its monuments quite definitely begin to determine radiocarbon dates started from 38-36 centuries BC.¹³ Most of the radiocarbon dates associated with the middle and the second half of the 4th millennium BC. Probably, this phenomenon is due to the fact that the period of formation of the considered phenomenon can have low impact burial materials and layers of settlements.

The Maikop burial mound building tradition is markedly different from the Chalkolithic one. It was often associated with stone in the form of cobbles, pebbles, slabs. There are not convincing evidence about the feasts of ceramics.

Burial ceremony of the Maikop-Novosvobodnaya community is one of the main features of its funerary practices. For the tribes of the Maikop early variant (the so called Galugaevsko-Sereginskiy variant),¹⁴ it presents small and large earthen kurgans with a ceramic assemblage belonging to the Maikop-Novosvobodnaya community (daggers with three angle hands, ceramics of North Mesopotamian forms, so called ceramics of Maikop-Leilatepe culture traditions), graves with stone-ground tombs built of pebbles. It has been already raised the question in the literature about the origin of this variant. R. M. Munchaev wrote that such a topic has been existed, but its solution was very

difficult. It is clear that it appeared in the steppes north of the Black Sea region earlier than in Transcaucasia.¹⁵ Of course, it should be noted that the phenomenon of the appearance of the kurgan – is the phenomenon of convergent. It was known to the peoples for both the old and the new world.

Chronologically Maikop's kurgans are younger then Eneolithic burial mounds in the Caucasus. Could the tradition of burial mounds of the Chalcolithic period influence the Maikop kurgan tradition? Apparently, yes, since we have clear evidence of the coexistence of monuments of the steppe of the Chalcolithic period and monuments of the Maikop-Novosvobodnaya community. This is evidenced by the finds of things of the Maikop culture in the kurgans of the Bronze Age, as in Kostirski VIII burial ground k.3, g.4, k.3 g.9.¹⁶

In Kurgan 2 of Komarov cemetery dated back to the Chalcolithic period dating the time of Tripolye BI (4700-4300/4200 BC),¹⁷ vessels were found aside of embankment. They have analogues in the context of the Maikop culture, which may be interpreted as a funeral gifts.¹⁸ Complex of the k.17 g.6 at the Aigurskiy cemetery with things characteristic to the period of Trypillia BI date back to 3632-3378 BC and correspond to the dates of the Maikop-Novosvobodnaya community.¹⁹ Pots of the Maikop-Novosvobodnaya community found on the settlement Konstantinivskoie at Low Don are dated to the local Chalcolithic period.²⁰ All these cases allow to think about coexistence of native complexes of the Chalcolithic period with the Maikop's tribes, and about the possibility of retaining the existence of sets of time Trypillia BI in the steppes of the Northern Caucasus until the beginning of the era of the Maikop culture.

However, the Maikop burial mound tradition of the construction is markedly different from Chalkolithic burial rites. It was often associated with stone in the form of cobbles, pebbles, and slabs. There are not observed evidence about the feasts of ceramics for Chalkolithic kurgans.

We may discuss two types in organization of kurgans' space by people of the Maikop-Novosvobodnaya community – as not megalithic and megalithic traditions. Not megalithic burial tradition was embodied in the construction of embankments and the construction of large mounds with altitude of 3 to 10 or

¹⁰ Manzura and Orlova. 2010: 88.

¹¹ Korenevskiy *et al.* 2008: 154, Plate 1.27.

¹² Korenevskiy and Nager 1987: 83, Figure 5.

¹³ Korenevskiy 2011: 21-34.

¹⁴ Korenevskiy 2004: 50-53.

¹⁵ Munchaev 1975: 309.

¹⁶ Zhitnicov and Ilukov 2002.

¹⁷ Videiko 2003.

¹⁸ Korenevskiy and Nagler 1987: 88, Figure 4.

¹⁹ Korenevskiy 2012a: 64.

²⁰ Kiyashko 1994.

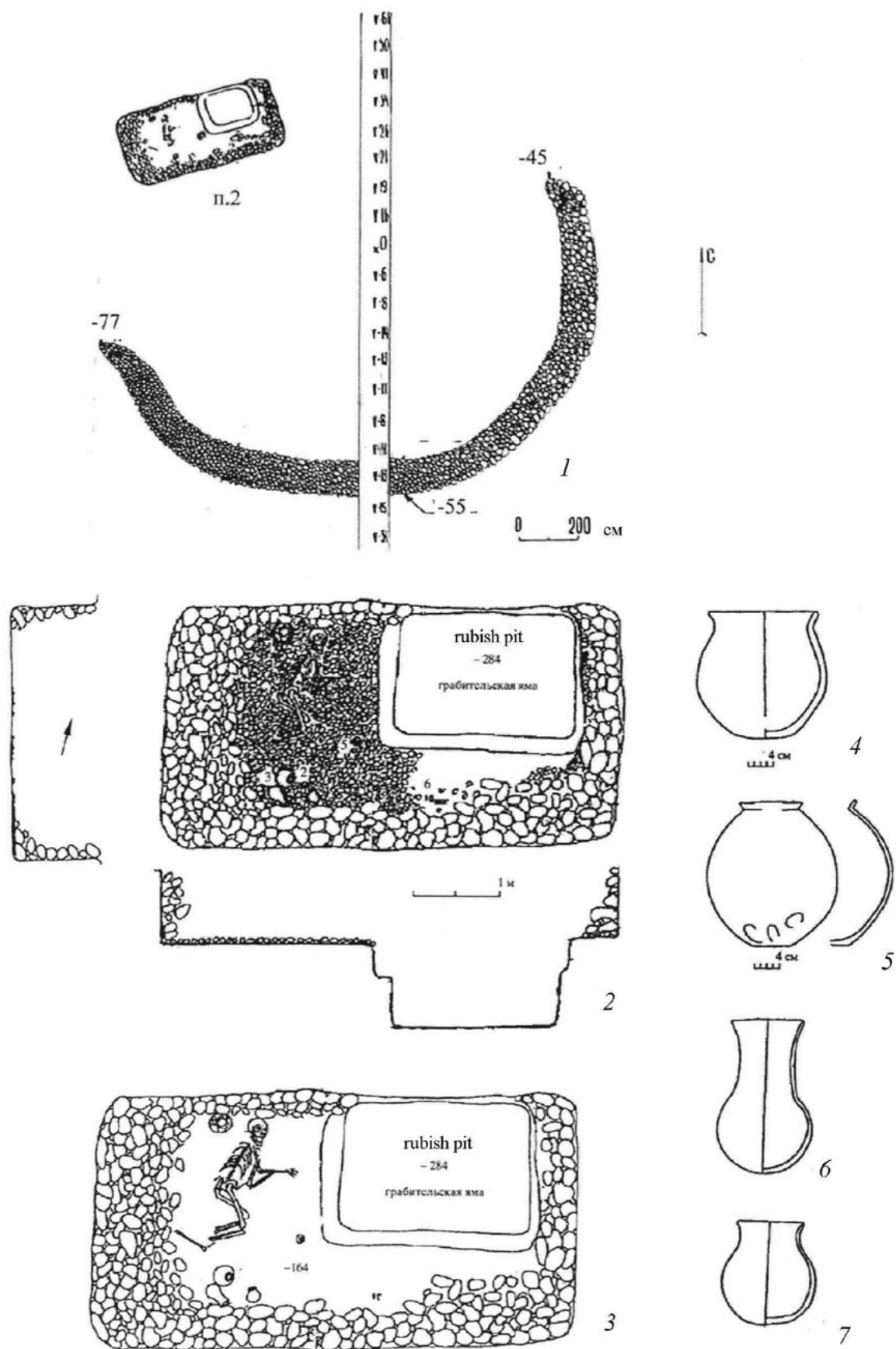


Figure 3. Sunja cemetery kurgan 11.
1: Plane of the kurgan; 2: grave with pebble on the bottom; 3: pose of skeleton; 4-7: pots.

more meters, as the kurgans of S. Zamankul in North Ossetia.²¹

Megalithic tradition of the Maikop's tribes has three variants. The first variant is the inclusion of the use of pebbles in burial structures in the form of stone circles, covering the bottom of the pits with pebbles, the construction of the stone tomb on the earth's surface from pebbles. The second variant involves the use of funerary structures (boxes, tombs, cromlechs) of stone slabs in combination with pebble calculations. Third – the use of primitive anthropomorphic sculpture. Below we will briefly look at each of them.

Common features of burial practices of the Maikop-Novosvobodnaya community include the position of the skeleton crouched on the side, use red paint (ochre and cinnabar) in a funeral ceremony (Figure 3, 4, 5, 2.3).²² Weapons and tools were put in the corner of grave or under a wall. Such a method of placement of the tools and weapons in the tomb we called in the abstract tradition, as the mythology of burial rite 'not tied' to the provision of weapons or tools directly to the hand or the body of the deceased person. It is possible to believe that the canon of the religious mythology of death in the Maikop tribes differed considerably from those beliefs that were in Proto-Pit grave culture in the preceding period.²³

The closest analogy of the pebbly tradition are the early kurgans of the Maikop-Novosvobodnaya community dated back to the first half of the 4th millennium BC is known from the finds located to the south of the Caucasus Mountains, in the North-Western regions of the Kura lowland. There were excavated more than 20 kurgans from the same Maikop-Leilatepe tradition in the necropolis of Soyug Bulag (Figure 5.1; 6) and Katushevy.²⁴ Given its information, it is possible to draw the following conclusions.

Kurgans of the burial ground Soyug-Bulag reflect the same Maikop tradition – to put of a deceased person in a position to the side and crouched, placing his weapons under the wall of graves (Figure 4).

The construction of pits is different from Maikop structures in the form of the facing walls of earthen bricks. Small mounds of Soyug Bulag had diameter of 15-20m and have not practically embankments of earth. Their designs include rings of stone of cobblestone, a width of 2m and a throw of a stone burial, the distance between the stone cast of the grave, and of a cromlech, about equal to the width of the cromlech. Dated

burial mounds of Soyug Bulag related to the early 4th Millennium BC (Figure 5).²⁵

The Maikop kurgans of the early variant with the burials in the pits and cromlechs contain daggers with three angle hands which are known, for example, from the burial Sunzha at the town of Vladikavkaz.²⁶ However, there is no sketch of stone over the graves. Embankments of kurgans were made with earth. The shape of the pits is characterized by elongated proportions. In the kurgans of Soyug Bulag such pits were not observed. The burial mounds could be surrounded by a stone ring – cromlech or not to have it. In the area of the cromlech were made feasts. The distances between the tombs and stone rings were much more than the width of the stone ring. At the bottom of the pits traced the pebbly layer. The burial mounds at Soyug Bulag are quite noticeable.

Among the Maikop's kurgans with daggers of early type were known some elite burials. They contained gold and weapons and were constructed in the form of ground tombs of pebbles (Rassvet k.3, g.3, Mostovskaya k.3 g.1, Maryinsky-5 k.1 g.33. See Figure 4).²⁷ Counterparts they have in the mound of Kavtushavi²⁸ and in the cemetery Soyug Bulag.²⁹ Thus, in all probability the idea of kurgan building dates back of the beginning of the 4th millennium BC in the Northern Caucasus. Transcaucasia has developed its own way, convergent (under the influence of similar factors), with the perception of the Northern Caucasus more ancient Proto-Pit grave traditions of the local population. There were the idea of an earth embankment, the idea spread out around the tomb of the earth dug out from grave ('vikid') (Figure 1.7), the use of ochre in burial rites and the form of the catacomb graves.³⁰

Megalithic tradition with the use of the processed stone slabs is reflected in the construction of stone tombs and boxes of the Novosvobodnaya group in the Western Caucasus (and by tribes of the Dolinsky variant in the Central Caucasus).³¹ Stone mortuary monuments of the Maikop-Novosvobodnaya community the plates are all on earth structures. They were previously divided into the usual boxes including: mini-megaliths – burial for kids, simple grave – boxes for adults with a length of 1.8m along the long wall, boxes-tombs for adults – larger structures with a length along the long wall over 1.8m to 3.13m (Nalchik tomb, the tomb Kishpek, Figures 7.1-8).³² There were highlights boxes: tombs 1 and 2, excavated by N. A. Veselovsky³³ and the tombs

²¹ Korenevskiy 2004: 130, Figure 32.

²² Kantorovich and Maslov 2009.

²³ Korenevskiy 2004; Rezepkin 2012.

²⁴ These monuments have been published repeatedly. The latest summary was made by N. Museibli (2014).

²⁵ Ahundov 2008; Lionnet *et al.* 2008; Museibli 2014.

²⁶ Kozaev 1988; 1998; Korenevskiy 2004.

²⁷ Kantorovich *et al.* 2013; Korenevskiy 2004.

²⁸ Makharadze 2007.

²⁹ Museibli 2014.

³⁰ Korenevskiy 2012a.

³¹ Korenevskiy 2004: 54-58.

³² Chechenov 1973; 1980.

³³ Veselovsky 1900.

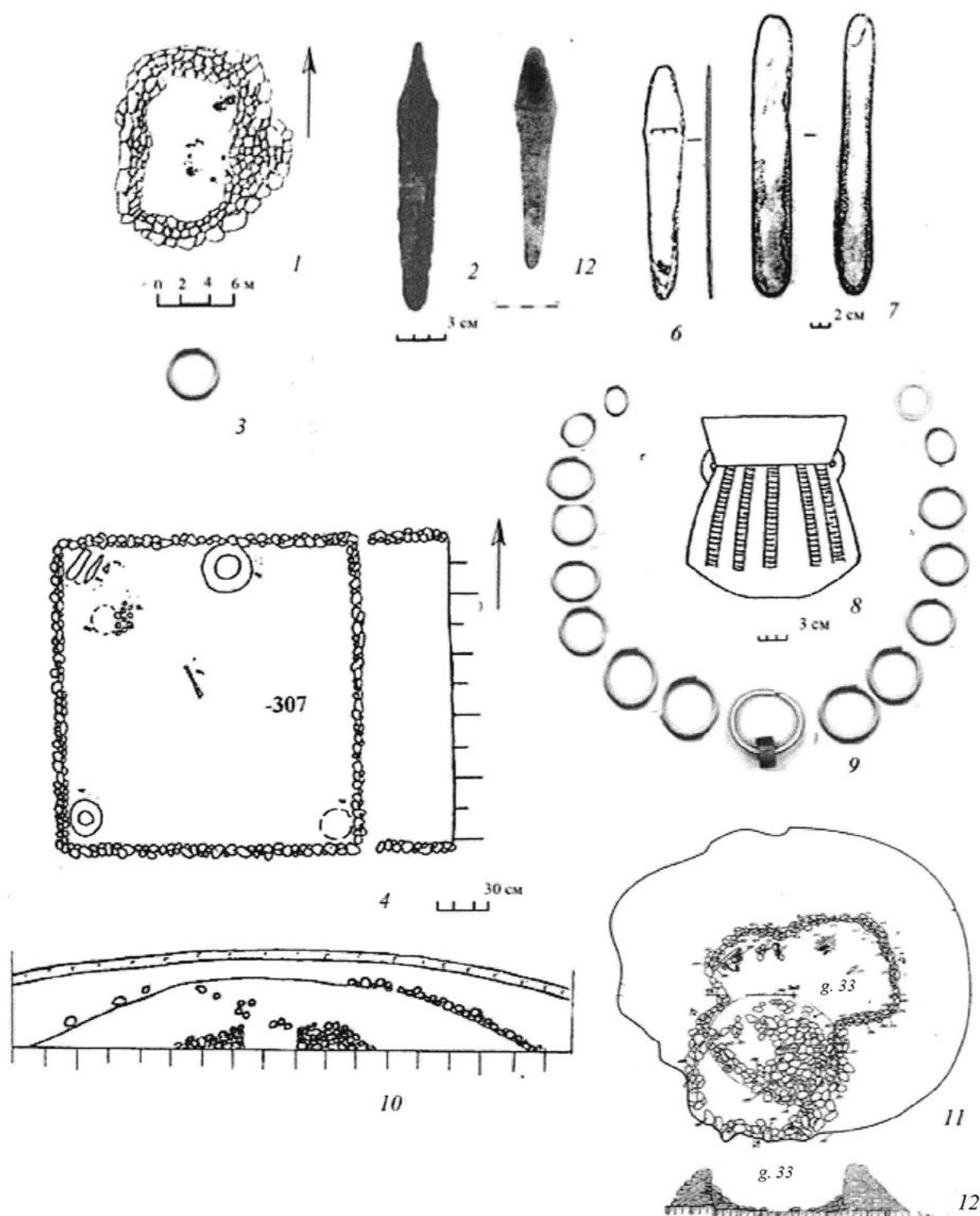


Figure 4. Tombs with pebble.

1-3: Rassvet k.3; 4-10: Mostovskaya k.3 g.1 (after Korenevskiy 2004); 11-12: Marinskaya – 5 k.1 g.33 (after Kantorovich *et al.* 2009).

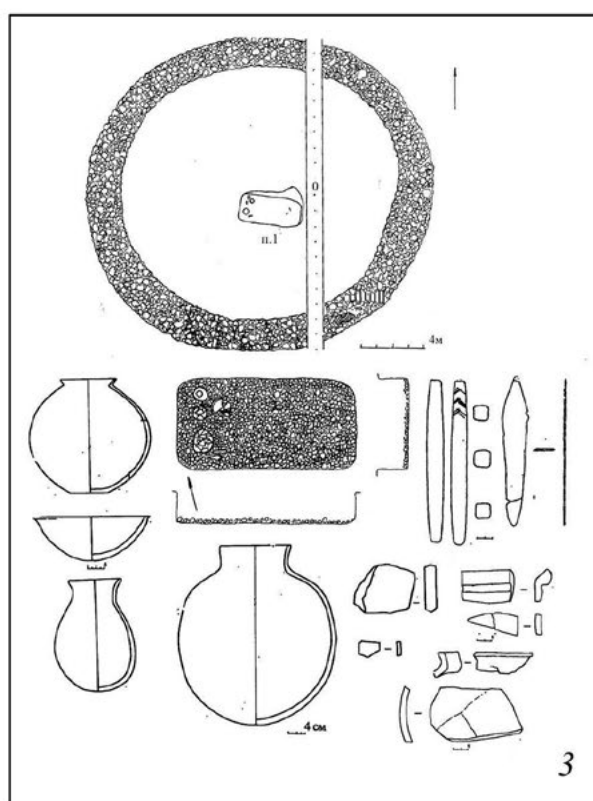
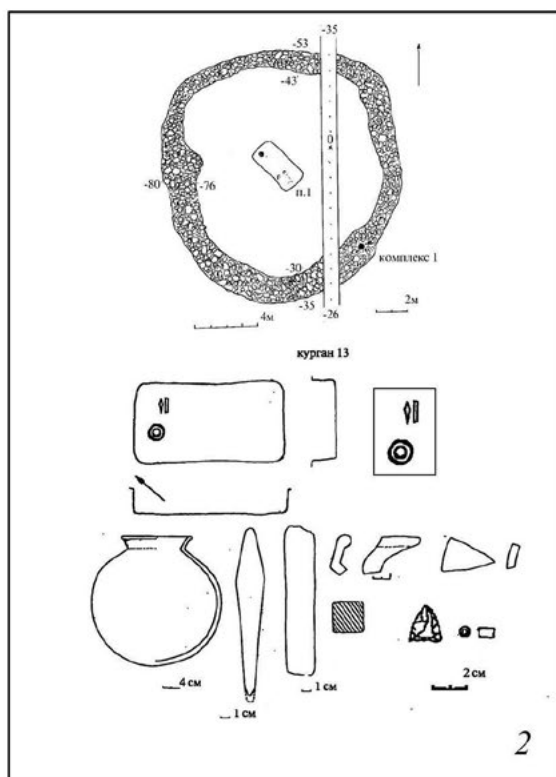
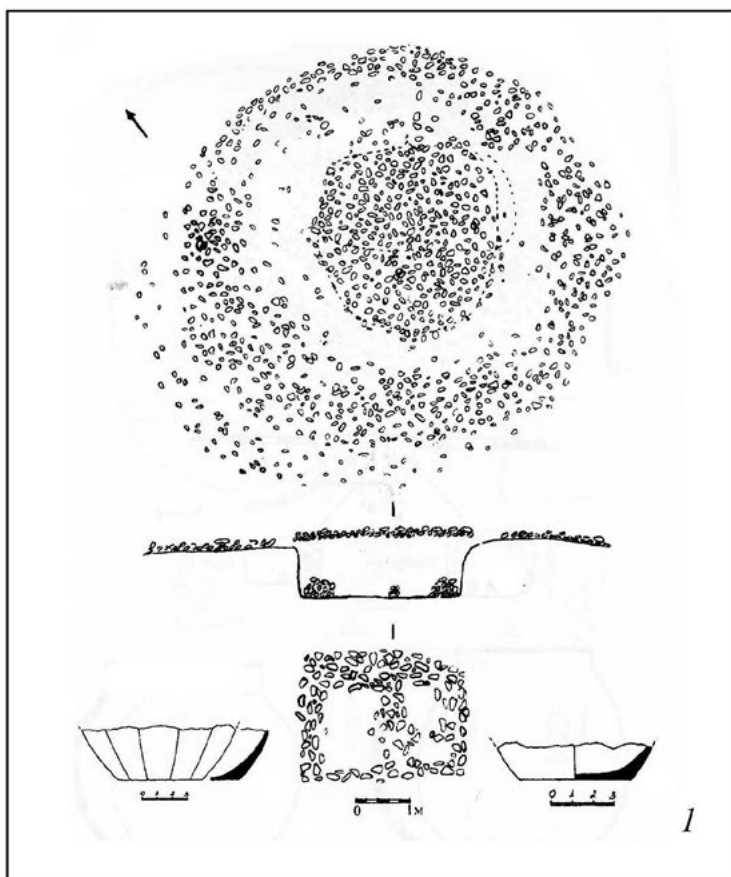


Figure 5. Barrows with stone cromlechs of cobblestone.
1: Soyug Bulag k. 16 (after Museibli 2014), 2-k. 13 g. 2, 3 – Sunjenskiy cemetery g. 1 k. 21 (after Kozaev, 1988, 1998).

of the cemetery Klady, excavated by D. A. Rezepkin, k. 28/1, 30/1, 5/31.³⁴ V. A. Trifonov found that the ruffs of Novosvobodnaya tombs were made in the overlap mode, when some rims of their endings were blocked by others.³⁵

The mythological idea of these constructions involves placing post-mortem of the noble warrior and leader at the level of the surface of the earth, not in a pit dug in the ground. Here, we clearly see the development of these features of the funeral rite, the continuity of the idea of burial of noble kinsman on the ground in a pebble design of the early tribes of the early Maikop variant.

In all probability, Maikop tribes developed the idea of the fear dealt with the spirit of the deceased influential person. Hence, all the corners and cracks between the boards carefully closed with the pebbles and clay. The bottom of the stone structure was covered with stone slabs. The overlap of the tomb made of stone slabs. The walls of the tombs could be painted with red paint, on them were placed the magic Figures. Among the paintings one can discern the string of onagers, the seated Figure of a deity standing incorporeal Figure with tilted to the side with one hand, prestigious weapons – bows and quivers. Tombs of the Dolinsky variant include anthropomorphic plates composed of slabs of the ceiling.

Many of these details in the construction of the Maikop's tombs find similarities over the vast territory from Central Europe to Altai and the Northern Caucasus but this phenomenon is not the result of the influence of some tribes on others and it is of a convergent nature (e.g. the funnel beaker culture: *Trichterbecherkultur*, for example, tombs in Gottlich),³⁶ Altai monuments (boxes of Karakol),³⁷ as a manifestation of the mythology of the military elite of the 4th-3rd millennia BC, are essentially similar, although not identical, manifestations of material culture and primitive art.

Stone slabs could be included in a set of stones of cromlechs. However, this theme – plates in the composition of the cromlech of the Maikop's burial mound is poorly developed, except that it exists as a fact. Colourful cromlech of the plates was opened in kurgan 3 cemetery Inozemzchevo-1 2000 situated close to the city of Pyatigorsk.³⁸

The megalithic traditions in the periphery of settlement of the Maikop-Novosvobodnaya community found its analogies in the territory of the Kuma-

Manych depression, and in the Crimea. Structures in type of rocked boxes with Maikop burials found in the northern regions of the Stavropol region. Large ground stone box was placed in the centre space burial (burial 8) mound 22 Aigurski-2 cemetery.³⁹

In the Crimea in kurgan 3, called 'Kurban Bayram' in the village of Dolinka was discovered in a stone burial box of typesetting plates (Figure 8).⁴⁰ Each of the plates was painted in red colour with the image of the 'Tree of Life'. The bottom of the burial was covered with a plate and covered with chalk dust. On the bottom there are traces of the sled platform. On the platform was put to the deceased person. The backbone of almost not preserved, but his remains suggest that the deceased was laid in position crouched on the back. At the right shoulder lay a copper axe with a handle, near the handle – a big flint knife. The left shoulder was a copper cutting knife, a chisel with a wooden handle, copper fork. Below them lay a copper adze, wooden arms bent at a sharp angle the end. Here were the remnants of the skin from the bag, which contained 6 pendants from the teeth of a predator, two bone inserts and cylindrical pestle and stone tiles (Figure 8).

The big knife could also be a ritual flint dagger or a tool for filleting large fish. To spearhead such a huge size is hardly practical at a small thickness of the weapon. It could be very breakable.

This grave belongs to the Kemi-Oba culture, but most importantly, it belongs to a community of tribes, who buried relatives in the crouched position on the back (Figure 8).⁴¹

The gravel of stone box in burial mound Kurban Bayram is reminiscent of burials of the military elite of the Maikop-Novosvobodnaya community with their set of weapons and religious symbols, which can be referred to the two-horned fork. But it is connected with traditions of local tribes close to the beliefs of the Pit grave culture of the Steppe zone, adjacent to the Caucasus, judging by the posture of the deceased and the presence of a stone pestle. Of special note are the murals inside the tomb with images of the 'Tree of Life' as indicative of a particularly meaningful symbol for the mythology of the military elite of the steppe tribes. The analogy can be found at the tribes of Trypillya culture,⁴² on the tombs of the funnel beaker culture in Haale⁴³ and on the Nalchik tomb.⁴⁴

³⁴ Rezepkin 2012.

³⁵ Trifonov 2015.

³⁶ Häusler 1994; Korenevskiy 2015; Parzinger 2013; Schrickel 1966.

³⁷ Kubarev 2009.

³⁸ Korenevskiy 2005.

³⁹ Babenko 2003.

⁴⁰ Kolotuhin 2008.

⁴¹ Kolotuhin 2008: 223-242.

⁴² Chernish 1982.

⁴³ Schrickel 1966.

⁴⁴ Chechenov 1973.

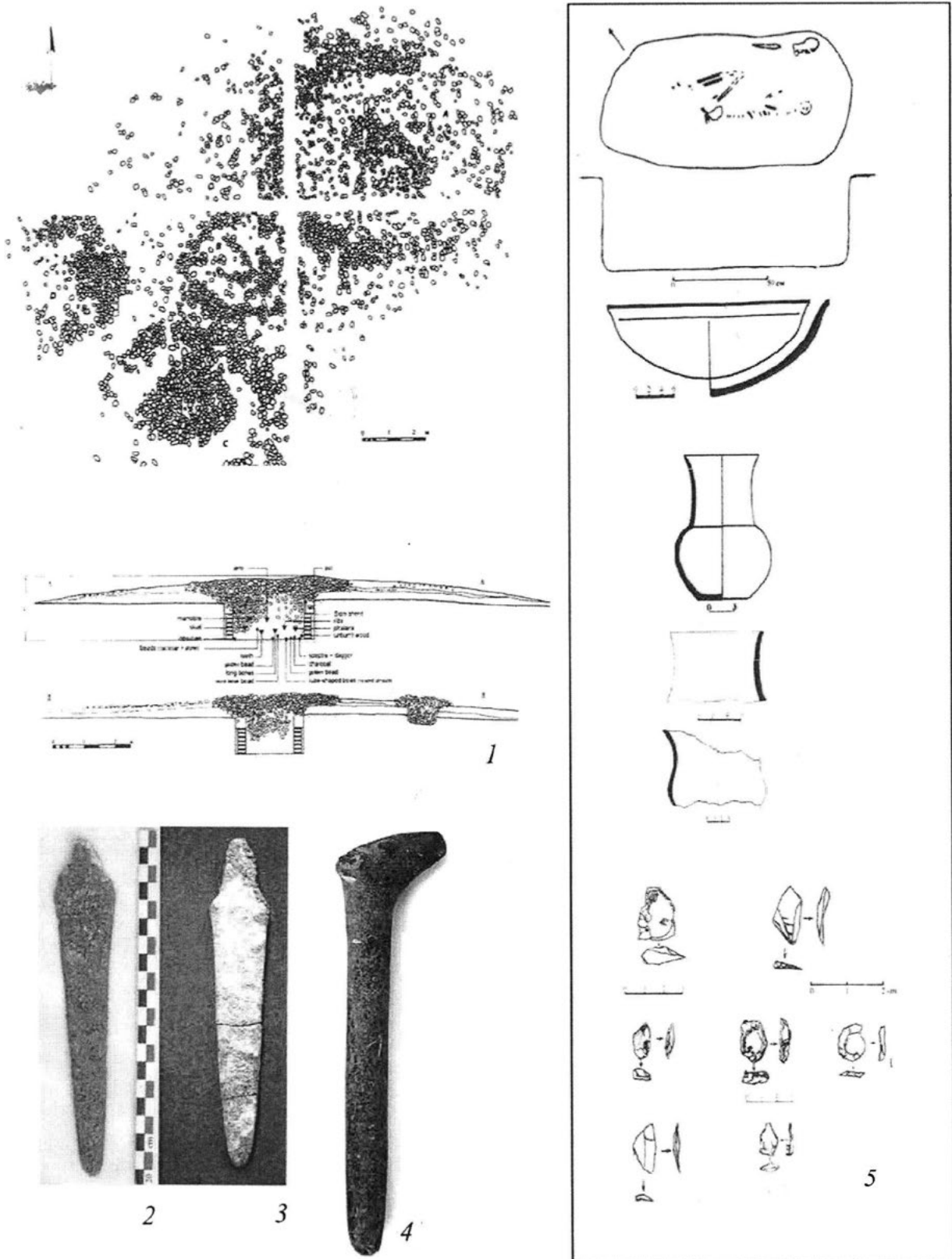


Figure 6. The burial mounds of Soyug Bulag.
1,3,4,6: Kurgan 1 2006; 2: Kurgan 5 2005 (after Museibli 2014).

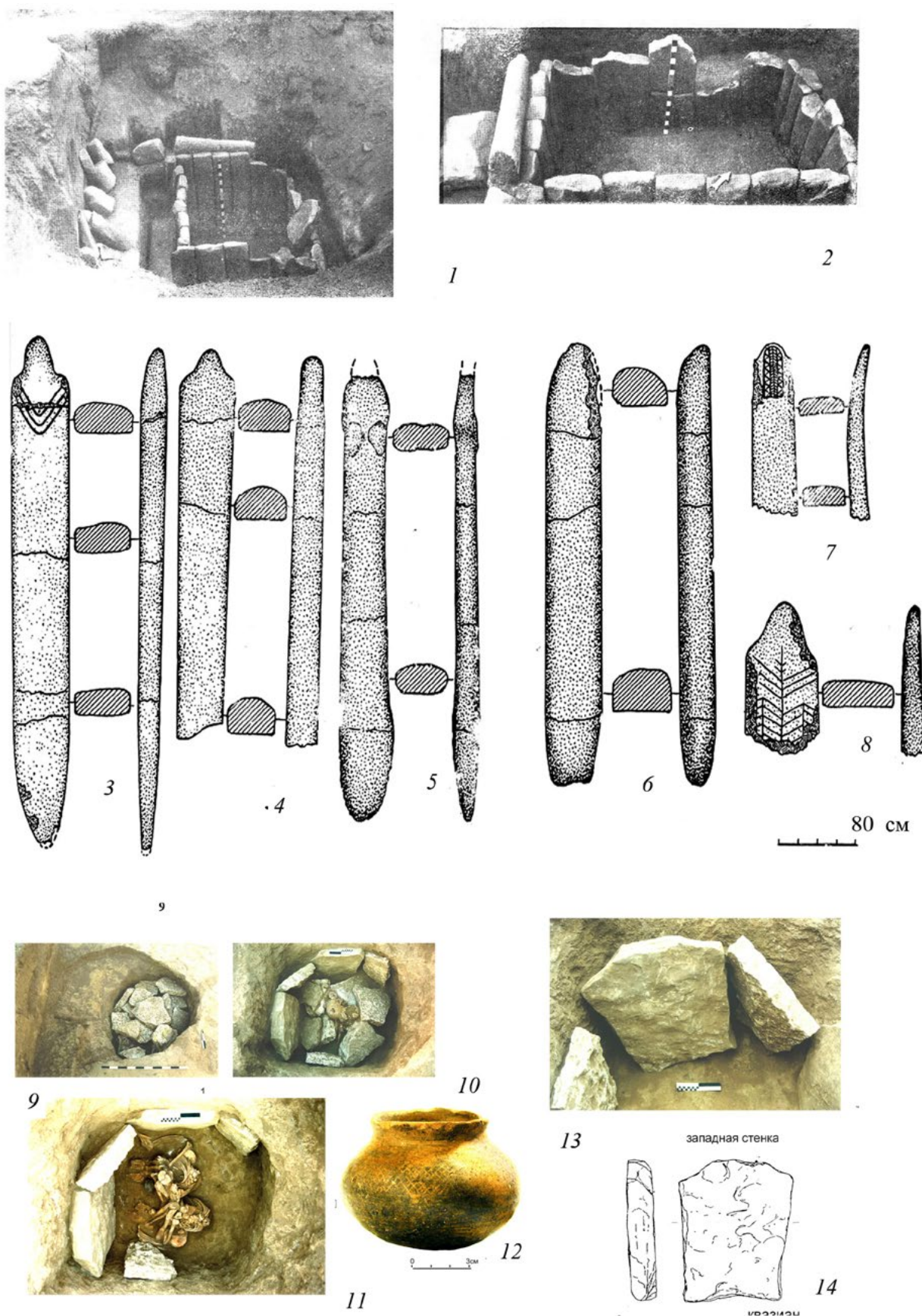


Figure 7. Complexes with anthropomorphic stelae.
1-8: Nalchik tomb (after Chechenov 1973); 9-14: burial 195 Large Ipatovo Kurgan (after Korenevskiy et al. 2007).

Anthropomorphism in the construction of megaliths belong to the Maikop-Novosvobodnaya community is manifested in the construction of slabs, reminiscent of a human Figure in the construction of Nalchik and Kishpek tombs (Figure 7.1-8). All Nalchik anthropomorphic slabs of the tomb were obviously specially made for such burial. They were carefully collected at the burial site in a big stone box. Some of them reflect the symbolism of the 'Tree of Life' with the application of concise images of trees.

The complex No. 195 (syncretic pit grave – Maikop culture burial) of the Big Ipatovo kurgan in Stavropol region reflects interesting data about anthropomorphism (Figure 7.9-14). The grave 195 was a catacomb. There were buried young people set in the sitting posture (male 19, female 12/13 years old) with anthropomorphic stale around them. That grave was not an ordinary and obviously wore the iconic character. They were not provided with high Maikop's marks ranks⁴⁵ with gold and weapons. Moreover the burial 195 reflects the dynamics of cult beliefs associated with anthropomorphic megaliths. They begin to accommodate as underground grave.

Currently it is not clear which deity appears in anthropomorphic form on the stones in Nalchik, Kishpek tombs or in the burial No. 195 of the Big Ipatovo kurgan, whether they were male, female deities or only have anthropomorphic character.

Complexes with megalithic monuments of the Kuma-Manych periphery chronologically correspond to the period of the Dolinsky variant of the Maikop-Novosvobodnaya community. So it makes sense to talk about more common beliefs of the tribes inhabited the main territory of the Maikop-Novosvobodnaya community and the Kuma-Manych periphery than on the influence of some tribes on others. The idea of creating stone images of man and god can reflect a certain change in mentality of people in the representation of deities of the forefathers, which began to realize in the form of stone anthropomorphic images.

In common aspect, the construction of megalithic burials of the plates of the Maikop-Novosvobodnaya community and the proliferation of anthropomorphism in stone may be associated with the growing importance in society of the military elite and its cults as an indicator of the development of the dominant male leadership in society.

More later stelae with male characters and weapons become very typical for cults of the Pit grave culture in the Northern Black sea and Crimea, reflecting the

general trend of megaliths connection with cults of male military symbols (Figure 7).

Conclusion

The emergence of ancient burial mounds can be considered as the pursuit of individual burial kindred outside of the tribal cemetery and a visual symbol over his grave as mound. Complex things assumed certain symbols of the set, which emphasized the prestige of the deceased's things and costume jewellery. The ancient mounds of the Caucasus have reflected an egalitarian tradition burial practices, with a marked status difference for individuals, particularly highlighting the importance of a master carpenter or woodcutter, dispenser of meat, a bow hunter for big game animals, e.g. deer, and leader in the religious sphere, the priest of the cult of the worship of the deity in the image of a dragon/lizard. The abundance of ochre in the grave could mean the magic of purification or rebirth. The emergence of burial mound ritual in the South Eastern Europe and in the Northern Caucasus was not associated with the formation of special military elite and was at the time of 'blade' revolution in the armament of the oldest farmers and ranchers. The bladed revolution began in the Middle East, Iran and Caucasus at the beginning of the 4th Millennium BC. It was caused by widespread arsenic and arsenic-nickel bronze, was accompanied by the production of daggers in copper base and casting axes and axe – chisel tools, as a new type of military and military-agrarian weapons. Against this background, there was a large migration, evolved a new culture and community. One of them was the Maikop-Novosvobodnaya community. Its ceramic was closely associated with the culture Leilatepe spread over the South Caucasus. It has analogy in the North-Mesopotamian culture as iconic tradition of ceramics with marks.

The history of the mound in the Caucasus in the beginning of the 4th Millennium BC is reborn anew. First of all it is made as a new mythology burial practices, according to which tools and weapons are not 'attached' to the buried person (hand, belt), and was stored at some distance from him. Consequently, the body of a deceased person, lying on side crouched, was not considered as a carrier of his soul in the afterlife. The soul could live independently. The formation of this mythology may be fixed in the central regions of the Greater Caucasus to the south and north of the Caucasus Mountains. It bearers became the military elite of the Leilatepe and Maikop cultures. The vast majority of the burial mounds with gold ornaments of the Maikop-Novosvobodnaya community belong to adult persons. It is difficult to highlight any particularly women's jewellery costume, while burials of women in mounds, of course, took place. A special place in the

⁴⁵ Korenevskiy et al. 2007.

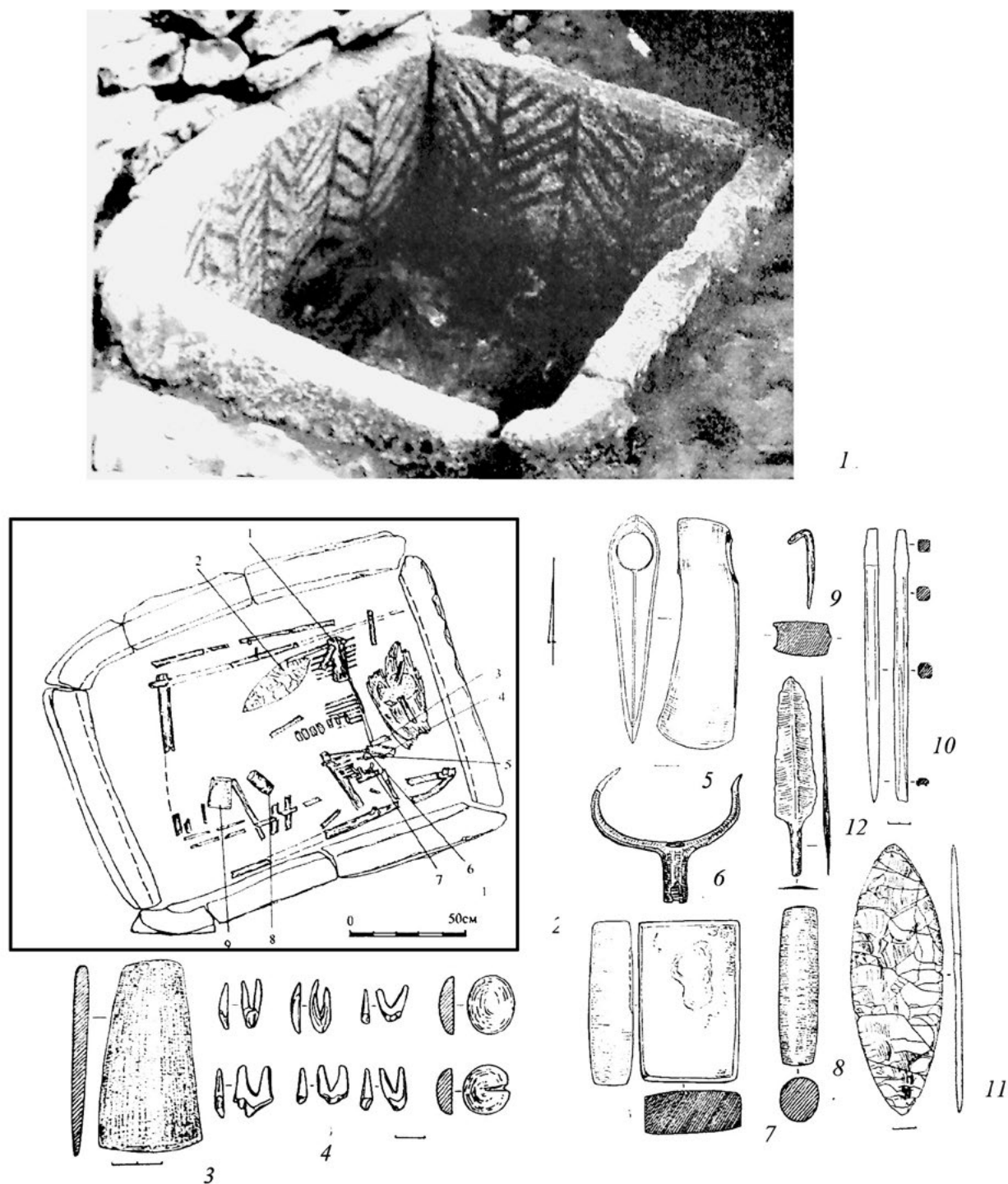


Figure 8. Kurgan Dolinka (after Kolotuhin 2008).

symbolism of the Maikop burial mound of Maikop is the placing not only weapons, tools, and woodworking, but also decorations with symbols of the cult of the 'Tree of Life', the mistress of which was the great goddess of war and love as Inanna-Ishtar in the myths of the ancient Near East.⁴⁶ Therefore, the androgenic nature of this complex is quite probable.

Unfortunately, many details of the burial practices remain unknown due to the mass destruction of the Maikop and early relativistic under barrow burials, probably associated with a particular post burial actions or even robbing graves.

Making burial space tribes an early version of the Maikop-Novosvobodnaya community and egalitarian culture looked as the creation of a magical ring of stones around the burial pit dug in the ground. On the territory of the South Caucasus among the burial monuments burial Soyug Bulag, attributable to the early period of Leilatepe culture embankments of earth were almost absent. In fact, these graves were the graves with the stone ring-fences in the form of cromlechs of cobblestone.

Earthen mounds over the burial fixed for the early periods of the Maikop-Novosvobodnaya community are more related to northern part of the Caucasus. There were created huge mounds up to 8-10m in height, such as the mounds at the v. Zamankul, with multiple layers of embankments above single burial as a reflection of the particular mythology of the burial monument and burial space.⁴⁷ Within the mound could build a crescent-shaped Figurer display of clay or pebbles. Overall, the burial traditions of the tribes of the Maikop-Novosvobodnaya community reflected the development of mythology (as part of a religious worldview) of the stratified society with sharply selected governmental military elite, but preserving still the significant symbols of burials with weapon complex and with tools of woodworking.

The emergence of the burial rite dealt with the Maikop-Novosvobodnaya community was associated with the formation of a special kind of elite that gave our disposal the situation in the tomb of gold and silver, metal utensils, weapons. Its representatives were military leaders, leaders of the religious sphere, the organizers of feasts and religious meals which had not yet broken with the significance of the symbolism of labour (woodworking, carpentry). The community of Maikop culture begun to spent much time and enormous efforts for construction of mounds over the graves of the nobility. The mound itself has become at times and the symbolism of the forces of fertility. The rich burials

of the military and religious elite of the Maikop culture were related with the tradition of building the tombs of pebbles, stone tombs from the treated plates.

The idea of anthropomorphism in the form of stone statues began to develop mainly in the Dolinsky variant in the Central Ciscaucasia and among the tribes of the Kuma-Manych periphery of the Maikop-Novosvobodnaya community, apparently, as the common cult of anthropomorphic gods of the population of the Caucasus and steppes of the Northern Black Sea.

M. Gimbutas (1977) has long raised the question about the connection of the early Indo-Europeans with ancient burial mounds. New data on burial mounds of the Eastern Europe and the Caucasus do not allow to associate the idea of building mounds exclusively with Indo-European population due to the convergence phenomenon of the mound and methodological complexity to solve ethno-linguistic questions only on the basis of archaeology of the 5th-4th millennia BC.

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⁴⁶ Korenevskiy 2012b.

⁴⁷ Korenevskiy and Rostunov 2004.

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A Note on Hittite Toponymy: the Case of Pittiyariga

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Abstract: The article discusses ^{URU}Pittiyariga, a toponym attested in the Hittite cuneiform texts in two different contexts. In one group of texts the deity of this place-name (^dU) figures as a divine witness in a number of treaties and in some rituals. In one Middle Hittite text (KUB XXIII 72+) Pittiyariga is mentioned as a place-name located in the Upper Euphrates region in the context of events connected with the rebellion of Pahhuwa. The study of the latter shows that, probably, Hittite texts distinguished two different localities, one in the Hittite-controlled area, the another in the plain of Erznka (modern Erzincan).

Keywords: Historical geography, Hittite cuneiform texts, Pittiyariga, Euphrates, Hayaša

The historical geography of the region along the upper course of the Euphrates and to the south up to the sources of Tigris until now offers considerable problems, in spite of the existence of special studies. One of the main difficulties while identifying ancient place-names with those (homonymous or nearly homonymous) attested in much more later sources (Classical Greek and Roman, Armenian, Byzantine, Arabic, as well as modern) is their possible migration with or without the population movement.

This paper is an attempt to discuss ^{URU}Pittiyariga, a toponym definitely located somewhere in the eastern reaches of Hittite control and attested to in a number of texts. The importance of this task is connected not only with the clarification of historical geography of the region, but also with religious matters of pre-Christian era.

In the Hittite texts ^{URU}Pittiyariga is attested in a number of treaties (from Suppiluliumas I onwards), where its Storm-god (^dU) figures as a divine witness along with other deities.¹ These texts are.

KBo I 1 IV 41'

KBo I 4 IV 7'

KBo V 3 I 45

KUB XXVI 39 I? 8

KUB XIX 50 RS IV 2 (only the final -ri-qa signs are preserved)

KBo XXII 39 Rev. III 12'

KBo VI 28 Rev. 32'

ABoT 56 II 6

KUB XXIII 77a Obv. 4

In all these cases the Storm-god Pittiyariga is listed among the deities of Hatti, which should indicate that

he was regarded as own from the Hittite perspective and, consequently, the locality itself should be sought in the Hittite-controlled territory.

The same deity is mentioned in a number of cultic texts:

1. KBo IV 13 I 36' = CTH 625.1.A (Fragment of AN.TAH.ŠUM festival)
2. KUB XXVII 1 = CTH 712 (The Festival of Ištar of Šamuha)
3. KUB XL 52 = CTH 89.3 (Fragment of a Prayer)

And only in two texts, both dated with the early New kingdom (Tudhaliya II and Arnuwanda I) Pittiyariga is attested as a place-name

1. The 'River-traffic' text (KUB XXXI 79 = CTH 188). Here Pittiyariga figures, along with two other toponyms (Arziya and Šamuha), as a locality on the bank or in the neighborhood of some navigable river.² The text describes a navigation downstream the river where Pittiyariga is said to have been situated above Šamuha since the cargo was brought there from Pittiyariga.
2. An instruction or speech of Arnuwanda I directed to the assembly of elders of the Upper Euphrates countries (KUB XXIII 72+ = CTH 146).³

The former text is easy to interpret since the context indicates that all three localities were situated near some navigable river, although not so deep. Until now two rivers were suggested as candidates for this river - Euphrates and Halys (Hitt. Purattu and Maraššantiya), which fuels a long-standing controversy regarding

¹ For the lists of divine witnesses see Yoshida 1996.

² CTH 188 (edited by Hagenbuchner 1989: 136ff.; Hoffner 2009: 81ff.; Marizza 2009: 123ff.).

³ Sayce 1930: 5ff. (transl.); Gurney 1948: 32ff. (transl.); Hoffner 1976: 60ff. (join 1684/u); Khachatryan 1998: 87-93 (partly translated); Kosyan 2006; Reichsmuth 2011.

place-names associated with that river.⁴ Unfortunately, we do not possess with decisive arguments regarding the identification of this river, as well as the possible location of any of these three localities.

The second text gives some clues for the location of Pittiyariga since here it appears in the context of the revolt in Pahhuwa, also located in the east, namely in the neighborhood of Išūwa. Here three passages could be useful for our purpose:

1) The rulers of Pittiyariga and Duggamma, namely Arihpizzi, Aišši and Ali-[.....] (the toponym associated with the latter is lost) were instructed to act as guarants for the loyalty of Pahhuwa in future.⁵ Logically, it could be deduced that both political units should have been located not far from Pahhuwa in order to act promptly if needed.

2) In the account dealing with the campaign against the rebels is said that the troops of Arhita (probably an ally of Pahhuwa), after the defeat near Kummaha had escaped to Pahhuwa.⁶ This means that Pahhuwa should be sought not too far from Kummaha (maybe also Arhita).

Since long Pahhuwa was looked for in the general area of the confluence of both Euphrates, mostly modern Divriği.⁷ Others had proposed a location either between Karasu and Muradsu (that is modern Munzurdağları = Arm. Mndzur),⁸ or somewhere in western part of modern Bingöl (Arm. Byurakn).

Thus, it would be rather difficult to imagine the flight of hostile troops of Hayaša⁹ from Kummaha to Pahhuwa if the latter, according to J. Garstang and O. R. Gurney, was located to the east of the Euphrates. In that case one has to explain from where came the Hittite army to

Kummaha and why did it bypassed the hostile Pahhuwa on its way to Kummaha.

3) The text refers to ^{URU}Kummaha and ^{URU}Timmiya as localities which were raided by the people of Pahhuwa.¹⁰ The latter was compared with modern Jimin to the east of Erzinka – at the distance of 4 km from the Urartian site of Altintepe.¹¹

The context of KUB XXIII 72+, thus, supports the idea that Pahhuwa should be looked in the neighborhood of the plain of Erzinka and Kummaha particularly.¹² If so, Pittiyariga also should have been located in this general area. Otherwise it would be difficult to explain why the ruler of a Halys-bound locality was ordered by the Hittite king to take the responsibility of the future loyalty of Pahhuwa. Like Pittiyariga, ^{URU}Duggama, the city of Hayaša also might be looked not too far from the plain of Erzinka.¹³

In regard to the territory of Hayaša and its possible location somewhere in the neighborhood of Kummaha the battle between Tudhaliya III and Karanni of Hayaša is of considerable importance since it have taken place exactly near Kummaha, as the 'Fragment 13' tells. Up to now the location of this political entity¹⁴ could not be established due to controversy connected with ^{URU}Aripša, one of its localities situated 'in the midst of the sea' (Š[À A.A]B.BA – KBo IV 4 Rev.5). Here we shall not discuss all arguments regarding the choice between the Black Sea, Lake Van or some other lake which can fit the word 'sea' in Hittite (aruna-), but instead find it useful to refer to another Hittite text where two toponyms probably should be located in Hayaša (or Azzi).¹⁵

These are ^{URU}Himmuwa and ^{URU}Utkuniša listed in one Hittite oracle text in the context of a campaign of Hattusili III or Tudhaliya IV against Azzi (KUB XLIX 11), which are actually similar to two 'countries' mentioned in the text of the Assyrian king Shalmaneser I dealing with his campaign against '8 countries' of

⁴ Forrer 1929: 243 (Pekerig, two different localities, in Išūwa and to the north-west of Kemah), Bilgiç 1945/51: 27f. (Pertek); Ünal 1974: 209f. (near the confluence of Euphrates and its western tributary Tohmasu); Garstang and Gurney 1959: 33ff. and Forlanini 1979: 184 n. 105 (the latter points on modern Tekkeköy near Zara on Halys); Laroche 1985: 91f. (modern Samuka to the north of Malatya) Houwink 1970: 62 n. 31 (on the bank of Karasu or Muradsu) Khachatryan 1971: 54f.; 1998: 35 (Btaric to the east of Erzinka = modern Erzincan); etc.

⁵ [A-NA ^{MA}A-r]i-ih-pí-iz-zi-in-na-a[š LÚ ^{URU}Pít-te-y]a?-ri-ga ^{MA}A-i-iš-ši-ya LÚ ^{URU}Du-ug-ga-a-ma ^{MA}A-li-[.....] LÚ ^{URU}.....] (KUB XXIII 72+ Rev.1).

⁶ 43) [ANŠE.KUR.RA^{HLA}ŠU(?) pa-ra-a pí-i]š-tén ŠA ^dUTUŠ^{HLA}-ia A-NA ^{GIŠ}TUKUL ku-i-e-eš pí-ra-an ar-ha iš-pár-te-er LÚ^{MES} ^{URU}A-ar-hi-i-ta (44) [.....] ku-iš šu-ma-a-aš A-NA LÚ^{MES} ^{URU}Pa-ah-hu-wa an-da ú-wa-an-za na-an hu-u-ma-an-ta-an an-da (45) [ar-nu-ut-tén nu DAM^{MES}ŠU-N]U DUMU^{MES}[-ŠU-NU ...]x šu-me-en-za-an-kán URU-ri ku-e-da-ni-ik-ik EGIR-an (KUB XXIII 72+ Obv.43-45).

⁷ Garstang 1942: 451; 1943: 48 (= modern Pingan); Klengel *et al.* 1999: 124 (near Divriği); Garstang's identification rests only on some similarity with Pingan.

⁸ Kosyan 2004a: 76.

⁹ The Storm-god of Arhita figures in the fragment of a treaty between the Hittite king and Hayaša (KUB XXVI 39 IV 32). Another deity - ^dBaltaik of Duggamma, also is mentioned in this treaty.

¹⁰ KUB XXIII 72+ Obv.30ff.: (30) [.....EGI]R-an ša-ra-a zi-ik-ki-it nu KUR ^{URU}I-šu-wa (31) [.....] an-da pa-a-an]-za nu-kán pa-a-ir ŠA KUR ^{URU}Kum-ma-a-ha URU.DIDL^{HLA} ku-e-nir (32) [.....]-ta Û LÚ^{MES} ^{URU}Ti-im-mi-ya na-at-ša-an an-da (33) [.....]. Although the context is damaged, the wording indicates on some hostile action.

¹¹ Khachatryan 1971: 86f.; TAVO XXIV, 1992, Map B IV6; Forlanini and Marazzi 1986 (^{URU}Timmiya is identical with ^{URU}Temiya of KUB XXVI 62 IV(?) 36' [Forrer 1931: 8]).

¹² 'wohl das heutige Pach, das an der Passstrasse vom nördlichen Euphrat nach Charput gelegen ist' (Cornelius 1973: 273) and 'Pach, südlich Erzingjan, nicht Divriği' (Cornelius 1973: 293); medieval Arm. *Pakh* in the east of Byurakn massive (modern Bingöl) (Khachatryan 1998: 36, 42); Previously he was looking for Pahhuwa to the east of Išūwa, pointing on *Pahhuenic' vank'* to the west of Lake Van (1971: 119).

¹³ del Monte and Tischler 1978: 435f.; Kosyan 2004a: 98-99.

¹⁴ For suggested opinions see del Monte and Tischler 1978: 59f., 63f.; del Monte 1992: 19; Kosyan 2004a: 44f., 48ff. (* ^{KUR(URU)}Azzi).

¹⁵ See also Kosyan 2015; 2016: 116ff.

Uruatri – ^{KUR}himme/himua and ^{KUR}uatqun/atkun (also ^{ŠADU}Yatkun).¹⁶

The above-mentioned could point on Hayaša (and Azzi) as a country located either to the north, north-east of Isuwa or even to the east, towards the Lake Van.¹⁷

Returning to Pittiyariga, it seems of some importance to discuss its linguistic structure.

Still J. Garstang had noticed the existence of toponymic suffix *-riga* in Pittiyariga, Išmeriga and Harmuriga (now tentatively read as Murmuriga without argumentation).¹⁸ Gr. Kapancyan, suggesting the comparison of Pittiyariga with Btaric of medieval Armenian sources (in the plain of Erzinka), distinguished here the diminutive suffix *-ik*.¹⁹ More promising seems G. Jahukyan's treatment of *-riga* according to whom it could be compared with the Armenian productive suffix *-aric* 'village, settlement' (also used separately in the form of *arinc*, *arinj*).²⁰ This toponymic suffix *-aric*,²¹ which has no satisfying etymology, is widely represented throughout the Armenian Highland until present times; for instance, Ltatic (Class. Lytararizon),²² Xaltoyaric,²³ Kusataric, Tiraric, Ktaric (Byzant. Kitharizon), Bagaric,²⁴ Btaric etc.,²⁵ also those attested only in Classical sources (Klotoidariza (or Olotoidariza), Basgoidariza). Still W. M. Ramsey had noticed that the suffix *-iza* of Classical period in Byzantine sources becomes *-izon*.²⁶

It should be mentioned that still in the early XX century there exists a settlement Bdaric approximately 20km to the south-west of Erzinka, not far from the mound of Altintepe.²⁷

Taking into account the above-mentioned arguments and also merely geopolitical considerations (namely that Arziya-Pittiyariga-Samuha were unlikely to be located near Kummaha or even in the plain of Erzinka),²⁸

it seems possible to suggest an alternative treatment of Pittiyariga (attested in KUB XXIII 72+).

Still O. R. Gurney had pointed on the existence of several homonymous place-names in the Hittite texts, namely two Uras, two Arinnas, and two Pahhuwas.²⁹ Whether these names were really homonyms or are the product of Hittite scribes' mistreatment of different ones,³⁰ is uncertain.

Summary. The study of all references of the toponym Pittiyariga shows that, probably, we deal with two different place-names (completely or nearly homonymous). One of these is attested in the Hittite treaties among the gods of Hatti and in some ritual texts and, therefore, should be sought in the Hittite territory. The second Pittiyariga which is mentioned in KUB XXIII 72+, tentatively could be located in the plain of Erzinka where the medieval sources report on Btaric located near Altintepe.³¹

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¹⁶ Kosyan 2011: 90ff.

¹⁷ For further arguments in favour of the location of Hayasa (and Azzi) somewhere between Isuwa and Lake Van see Kosyan 2015.

¹⁸ Garstang 1942: 451 ('Battiyariga has a Hurrian (or at least an eastern) appearance').

¹⁹ Kapancyan 1947: 59, 93. Approximately the same in Khachatryan 1998: 43.

²⁰ Jahukyan 1987: 337.

²¹ Recently the same according to Martirosyan 2010: 111.

²² See Ramsay 1962: 56 (on the road from Nicopolis to Satala; the latter we have compared ^{URU}Litta of KUB XXVI 62 Rev. IV 35' (Kosyan 2004b: 476):

²³ Probably, in the northern part of the province of Derjan (Turk. Tercan), where the Euphrates is joined by its tributary Sercam (Adontz 1908: 52).

²⁴ In Derjan, to the north of Mamakhatun, near the Euphrates; literally the 'dwelling of the god' (Hakobyan et al. 1986: 531).

²⁵ Ačaryan 1971: 258–259. Sometimes it is used separately (for example Haric in modern Armenia).

²⁶ Ramsay 1962: 56.

²⁷ According to Gr. Kapancyan (1947: 92–93 and n. 1).

²⁸ Besides the arguments against the localization of Pittiyariga and

two other localities along the Euphrates (Garstang and Gurney 1959: 33ff.) the another one should be suggested. If Tudhalya III had chosen Šamuha as his base before the reconquest of Hattusa, then it would appear that he and the prince Šuppiluliuma were residing in the same general area of Isuwa and Pahhuwa which seems more than strange.

²⁹ Gurney 1992.

³⁰ Like Iberia (Georgia) and Iberia (Spain), Albania (in the north-west of the Balkans) and Albania (in the southern Caucasus) in the Roman sources.

³¹ This idea first was suggested by Forrer (1931: 7), although his identification of Pittiyariga with Petscheritsch (16 km to the north-west of Kemakh) should be abandoned. The latter, probably, is the well-known Bagaric of medieval Armenian sources. Worth to mention that there were several homonymous place-names (Bagaric) in the plain of Erzinka and its neighborhood (1986: 531):

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Abbreviations

- CTH – Catalogue des textes hittites. Paris.
- KBo – Keilschrifttexte aus Boghazköi, Leipzig und Berlin.
- KUB – Keilschrifturkunden aus Boghazköy. Berlin.
- TAVO – Tübinger Atlas des Vorderen Orient. Tübingen.

Fortified Kura Arax Settlements in North-Western Iran

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Abstract: Between 1967 and 1978 the German archaeological institute in Tehran concentrated its work on North-western Iran. Besides the excavation at the Urartian site of Bastam every year intensive surveys were carried out and many hundreds of prehistoric sites recorded. Preliminary reports were published by Wolfram Kleiss in *Archäologische Mitteilungen aus Iran*. Often a small sketch map was added. Among these find spots were around one hundred Kura Arax sites, mostly mounds. But it was surprising that sites in the northern part of the area, built on rocky plateau, often showed some kind of surrounding wall. These sites are presented in this paper.

Keywords: Early Bronze Age, Kura Arax culture, north-western Iran, fortified settlements, *Archäologische Mitteilungen aus Iran*

The purpose of the paper is to present a few, but unique Kura Arax settlements in north-western Iran that were all surrounded by a kind of perimeter or fortification wall. They were discovered while Wolfram Kleiss conducted excavations at the Urartian site Bastam. He had discovered Bastam while doing a reconnaissance tour in Iranian Azerbaijan in 1967. Excavations at Bastam were conducted by him and the author with a team of archaeologists and experts from Germany, Iran and other countries between 1969 and 1978. The results of the first campaigns in 1969 and 1970 were published in *Archäologische Mitteilungen aus Iran* 3 (1970)¹ and 5 (1972).² The later campaigns between 1972 and 1978 were published in two large volumes: *Bastam I* (1979),³ *Bastam II* (1988).⁴ Besides concentrating on the excavations, Wolfram Kleiss and members of his team continued the reconnaissance tours every year which he had started in 1967. The main goal was finding new sites of the Urartian period. But in searching for ancient places there were found hundreds of sites of other periods too. The results of these surveys were published in German only in *Archäologische Mitteilungen aus Iran*, often only as a brief note. So it is not surprising that most of them remain unknown to the general scientific community. Today many of these reports are available as pdf from academia.edu and other websites. Tony Sagona's study on the Caucasian Region in the Early Bronze Age, published in 1984, listed Early Bronze Age places in Iran,⁵ excavated or found through surveys, up to 1980. Unfortunately German or Austrian reports on the Early Bronze Age in Iran published up to 1980 were not included, as they had only been published as brief notes in German. So the Kura Arax

settlement at Bastam, sites like Bolurabad⁶ or the superior site of Ravaz⁷ (today: Köhne Shahar) remained unknown. The reason was the journal *Archäologische Mitteilungen aus Iran*, where these reports had been published, was hardly available outside Germany. When we started work at Bastam in 1969, we had a very limited knowledge of Urartian archaeology and almost no knowledge of other periods in north-western Iran. So prehistoric sites we found during the surveys were just labelled prehistoric lacking clear identifiable finds. A good example was Ravaz, which we found in 1970 and were not able to identify it correctly.⁸ Most helpful for us was Charles Burney's book of 1971 in this respect, as he gave an enormous overview on the archaeology of the Southern Caucasus.⁹ So in 1978 again we went to Ravaz and this time we were able to recognize its date and importance.

So in honour of Gregory Areshjan, an eminent archaeologist and expert of the Bronze Age in the Southern Caucasus, I want to present the fortified Kura Arax sites we found in Iran in a small compilation. I simply call them fortified, though the walls may just be enclosure walls to keep the village safe. Only excavation could solve this question in every case. Karim Alizadeh recently clarified this point meticulously.¹⁰ The signatures used for the sites derive from Kroll 1984. The map (Figure 1) can only give an approximate situation of the sites. In the 1970, when the sites were found, neither exact maps nor GPS was available at that time. Only in some cases it was possible with the help of Google Earth to locate a site correctly.

Ravaz (MK 2), Köhne Shahar (modern correct name)

¹ Kleiss 1970; Kroll 1970, the reports are available as pdf from academia.edu.

² Kleiss 1972; Kroll 1972, the reports are available as pdf from academia.edu.

³ Kleiss 1979, the report is available as pdf from the AMAR website.

⁴ Kleiss 1988, the report is available as pdf from the AMAR website.

⁵ Sagona 1984.

⁶ Kleiss and Kroll 1975.

⁷ Kleiss and Kroll 1979.

⁸ Kleiss 1971: 51-53.

⁹ Burney 1971: 43-126.

¹⁰ Alizadeh *et al.* 2015: 41.

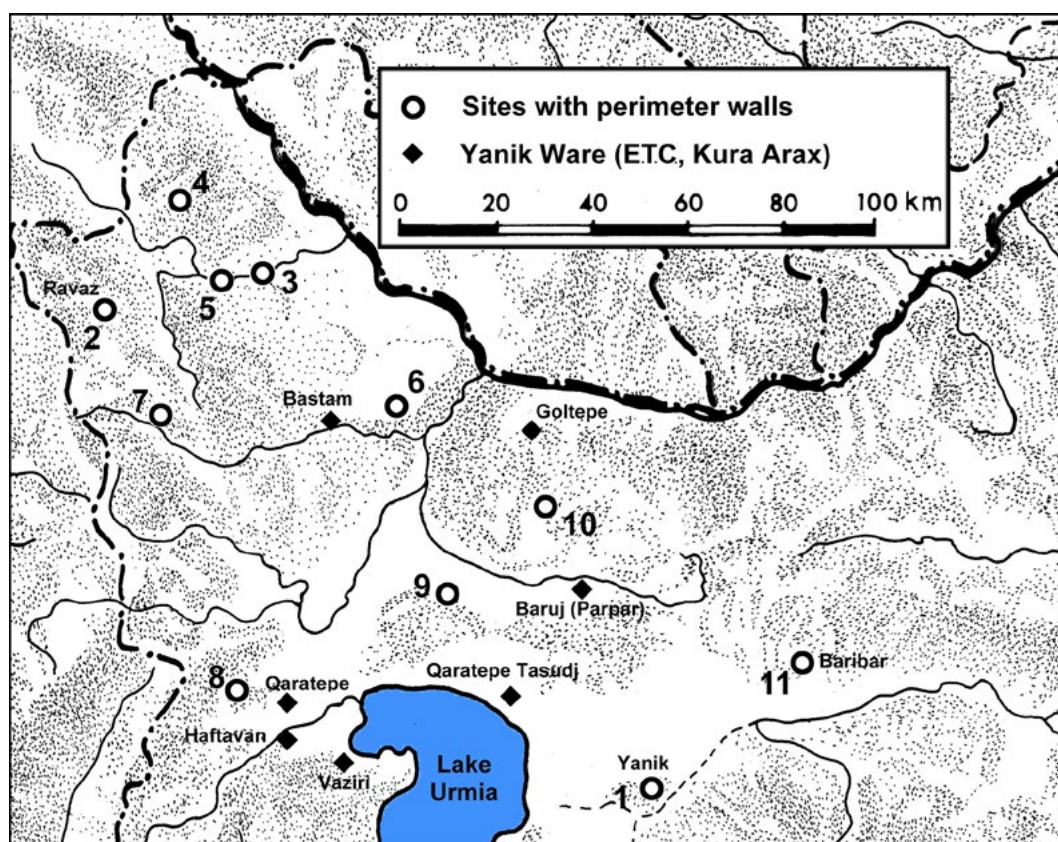


Figure 1. Major Early Bronze Age sites in north-north-western Iran.

1 = Yanik, 2 = Ravaz, 3 = Yakhvali, 4 = Site east of Danalu, 5 = Site east of Maku, 6 = Bolurabad, 7 = Kešiš Qal'eh, 8 = Settlement north of: Kafir Qal'eh, 9 = Qaladjug Tepe, 10 = Čakhmakhli Qal'eh, 11 = Baribar Qal'eh (map by S. Kroll).

Ravaz was discovered in 1970 and revisited in 1978. At that time a plan of the site was drawn (Figure 2) and a rich collection of surface material collected. The settlement is situated on a triangular shaped rocky plateau, around 14km north-west of Siahčešme (39°11'25.20"N, 44°17'46.09"E). The settlement (about 260m by 190m) is fortified with a wall of rough stones, round towers are added to the north-eastern wall in certain intervals. A gate can be seen in the East. Within the settlement streets, round and rectangular structures could be identified. Pottery and stone tools collected on the surface point to a date in EB II-III. Since 2012 an Iranian expedition under the direction of Karim Alizadeh is excavating the site.¹¹

Yakhvali (MK 3)

The small settlement (90m by 55m) was discovered in 1972 and revisited in 1978. It is situated 18 km east of Maku. The settlement is situated on a small rocky plateau, an oval shaped wall is enclosing the site

(Figure 3). A plan could be drawn, surface finds were pottery, obsidian and flint, all dating to EB II-III.¹²

Site 4 km east of Danalu (MK 16)

The site was discovered by members of the Bastam expedition in 1974. On a small rocky cliff a small settlement was spotted. Low walls were still visible which might have formed an enclosing wall (Figure 4). Among the finds collected was EB II-III pottery, obsidian blades and Middle Bronze Black on Red painted pottery.¹³

Site east of Maku (MK 51)

This small settlement on a rocky plateau was found in 1968 (Figure 5). It is situated 6 km east of Maku, near the road Maku and Tabriz. Rectangular and round structures were noted. A rough stone wall surrounded

¹¹ Bibliography: Kleiss 1971: 51-53, Abb. 3, Taf. 5, 1; 1979: 31-34, Abb. 5-8, Taf. 8; Kroll 1979: 37-47, Abb. 2-6; Alizadeh *et al.* 2015.

¹² Bibliography: Kleiss 1973: 20, Abb. 17, Taf. 1, 4; 1979: 27-31, Abb. 1-4; Kroll 1979: 34-37, Abb. 1

¹³ Bibliography: Kleiss 1975: 28-29, Abb. 4, Taf. 4, 2; 59, Abb. 11.

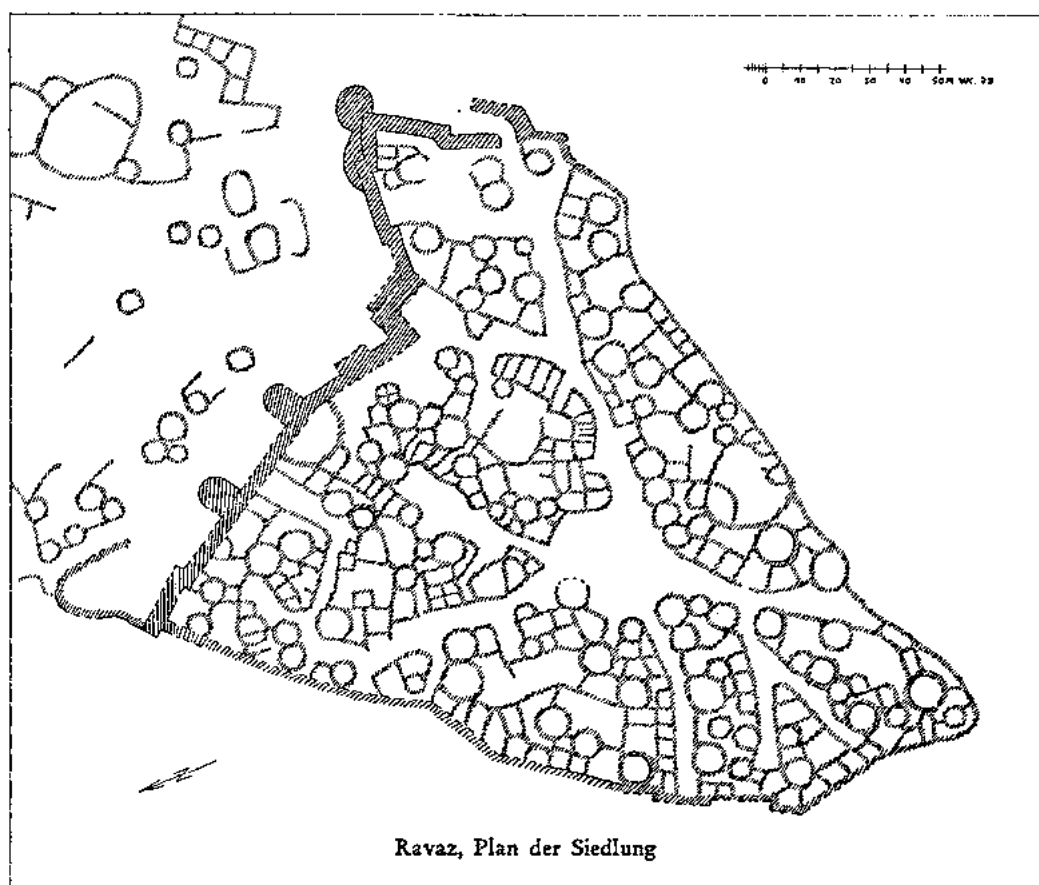


Figure 2: Plan of the fortified settlement of Ravaz (courtesy of W. Kleiss).

the plateau. Surface finds were pottery sherds only of EB II-III, no other periods.¹⁴

Bolurabad (KH 32)

Bolurabad is situated on the eastern end of the Qara Zia Eddin plain, 17 km to the west of Bastam and visible from there on clear days. It was discovered in 1974. The site consists of at least 2 small settlements and a walled settlement nearby on a mountain ridge (Figure 6). This ridge is surrounded by a rough stone wall, built in two phases at least. Within the wall some circular structures were visible. Surface finds consisted of EB II-III pottery only. No other artefacts were noted.¹⁵

Kešiš Qal'eh (Ali Sheikh Keshish Qal'eh, KH 43)

The small site, situated on a rocky plateau, was discovered by W. Kleiss in 1972. The site is situated north of the village of Ali Šeikh, 58 km northwest of Khoy, close to the larger village of Zuhabad. He could identify an enclosure wall running along the edge of

the plateau (Figure 7). Surface finds were sherds of EB II-III.¹⁶

Settlement north of: Kafir Qal'eh (SL 15)

Wolfram Kleiss found this settlement in form of a low *tepe* while working on the Urartian site of Kafir Qal'eh in 1977. The site is situated 12 km west of Salmas, north of the Urartian fortress. The size is about 115 by 55 m. On the northern and southern side of the *tepe* Kleiss found a low enclosure wall built of rough stones (Figure 8). Surface finds consisted of about 150 sherds all of EB II-III date.¹⁷

Qaladjug Tepe (MD 10)

This Tepe is situated 39 km west of Marand at the edge of the Marand plain near the village of Sangireh. It was discovered during a survey I carried out in 1978. The size is about 150 by 100 m. The low mound was surrounded by an enclosure wall built of rough stones (Figure 9). Surface finds consisted of mainly EB II-

¹⁴ Bibliography: Kleiss 1969: 13-14, Abb. 7, Taf. 3,3; 4,1.

¹⁵ Bibliography: Kleiss and Kroll 1975: 15-25.

¹⁶ Bibliography: Kleiss 1973: 16, Abb. 12-13.

¹⁷ Bibliography: Kleiss 1978: 29, Abb. 2-3; Kroll 1978: 60-61.

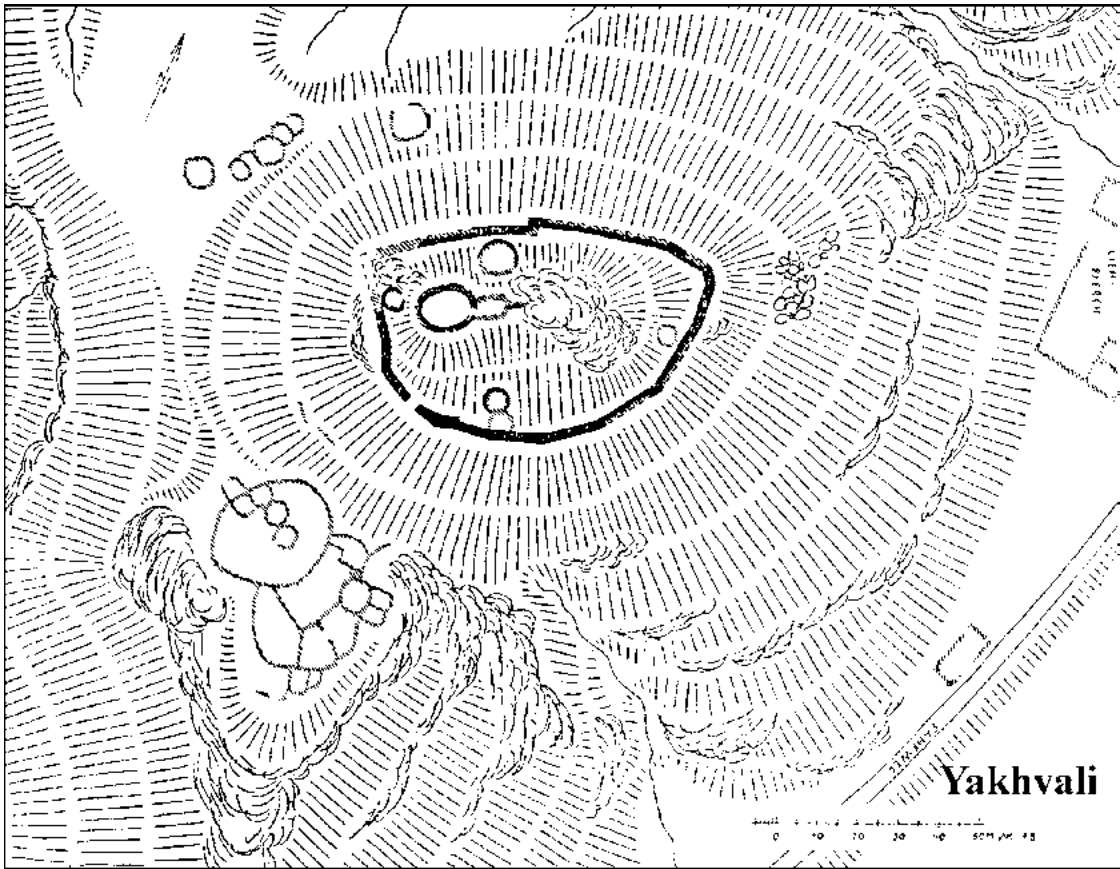


Figure 3: Plan of the fortified settlement of Yakhvali (courtesy of W. Kleiss).

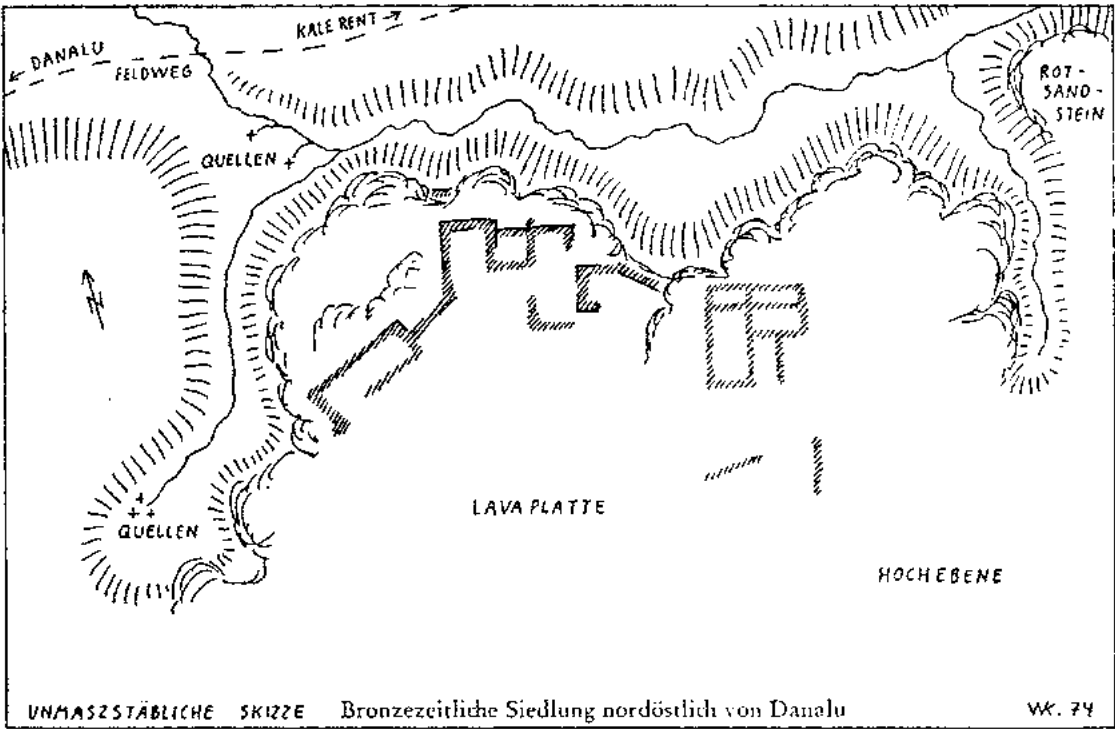


Figure 4: Sketch plan of the site 4 km east of Danalu (courtesy of W. Kleiss).

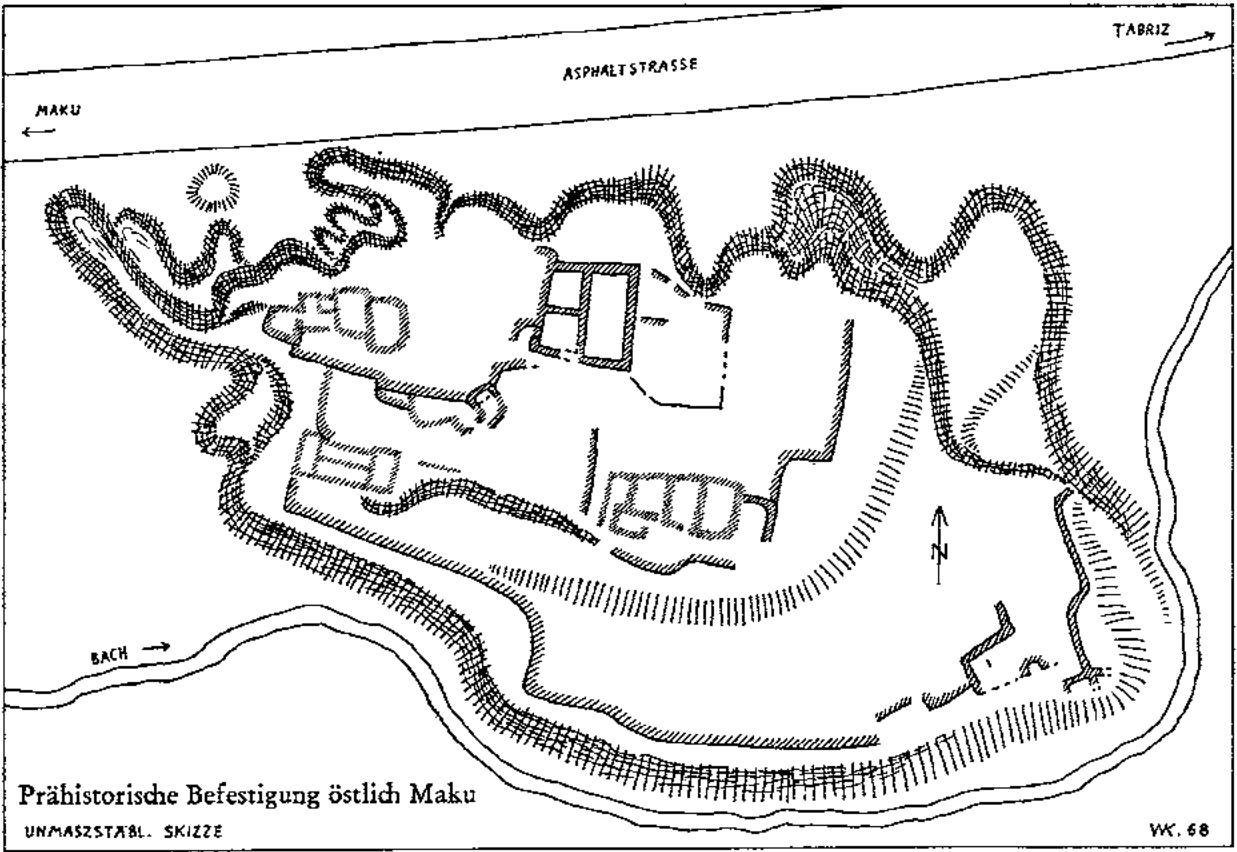


Figure 5: Sketch plan of the site 6 km east of Maku (courtesy of W. Kleiss).

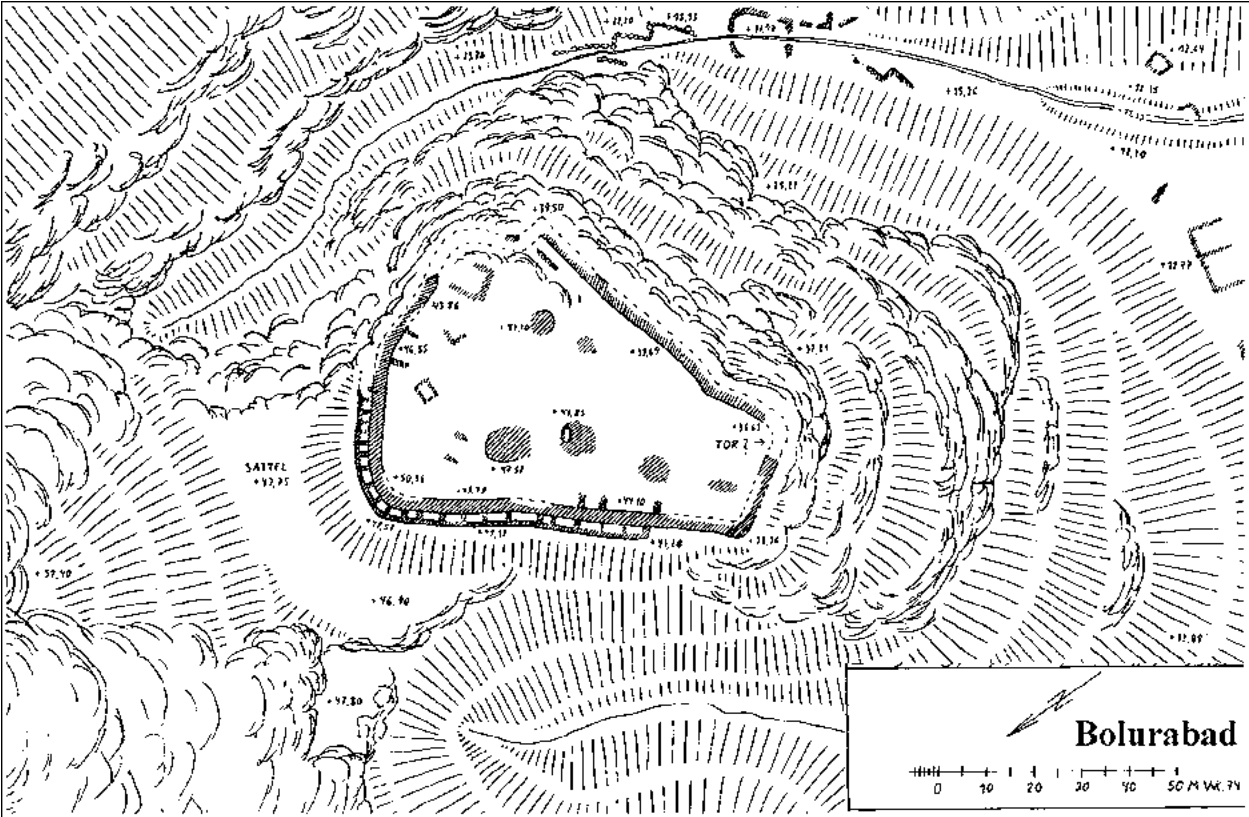


Figure 6: Plan of the fortified settlement of Bolurabad (courtesy of W. Kleiss).

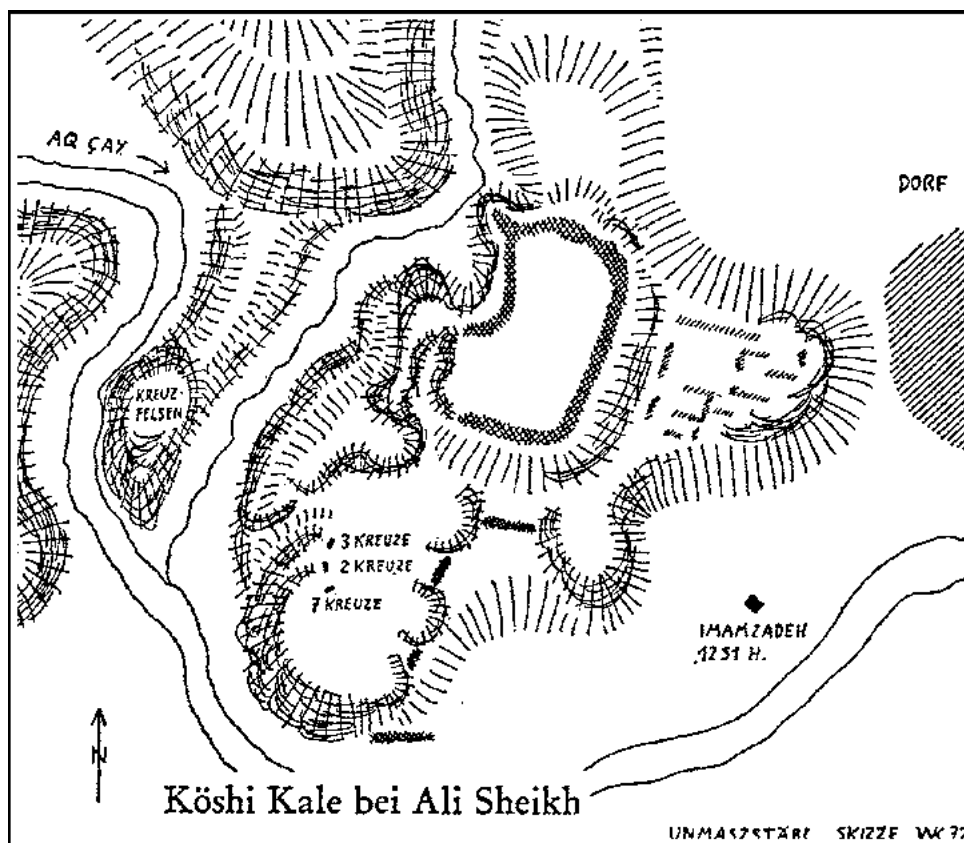


Figure 7: Sketch plan of Kešiš Qal'eh (courtesy of W. Kleiss).

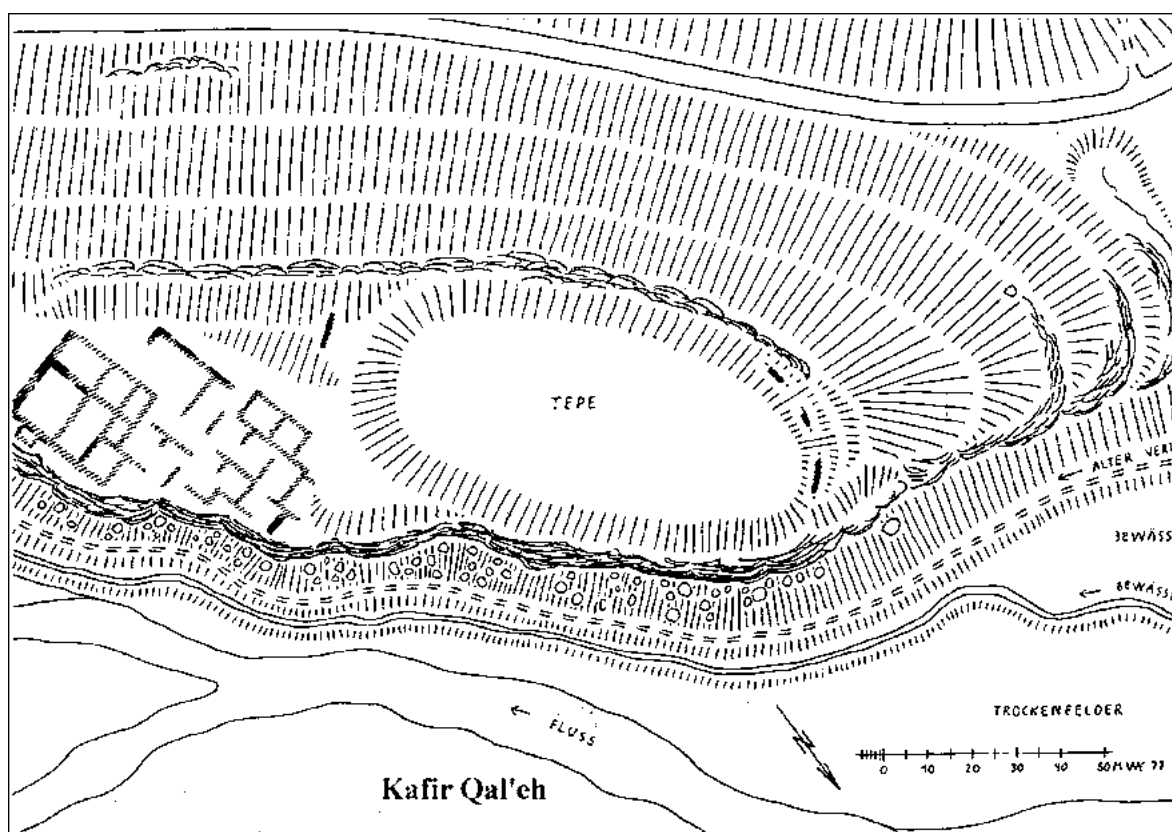


Figure 8: Plan of the walled settlement north of: Kafir Qal'eh (courtesy of W. Kleiss).

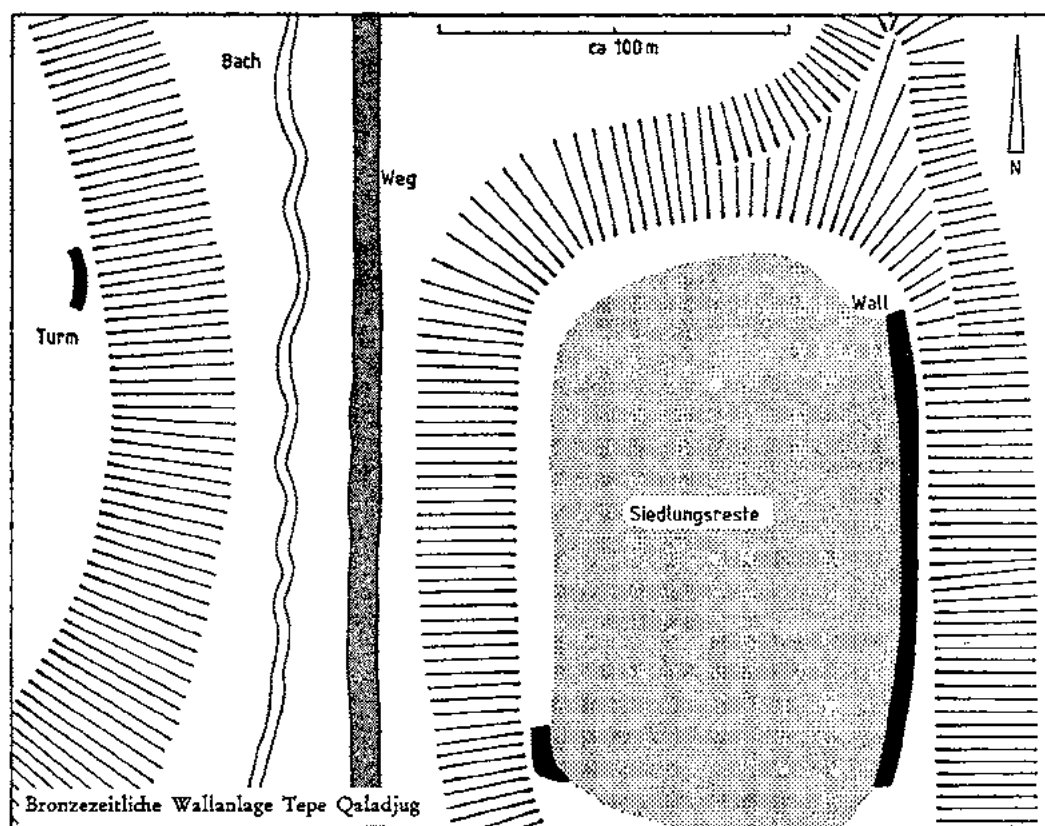


Figure 9: Plan of Qaladjug Tepe (plan by S. Kroll).

III sherds, all plain without any incised decoration. Naxcevan handles and some later sherds of Middle or Late Bronze Age were also found.¹⁸

Čakhmakhli Qal'eh (MD 24)

The small site is situated on a rocky cliff next to the railway Marand – Djulfa, about 35 km north of Marand (38°40'56.30"N, 45°38'44.29"E). Kleiss discovered it in 1974, did a sketch plan and collected surface finds. The cliff is surrounded by an enclosure wall built of rough stones (Figure 10). Different wall stubs were identified on the plateau, which might have been round and rectangular structures like at Ravaz. Surface finds consisted of EB II-III sherds only, all plain, dark grey to black without any incised decoration. Naxcevan handles were also found.¹⁹

Baribar Qal'eh (TA 3)

Near the village of Sarand, 75 km north-east of Tabriz, Kleiss found this settlement on a hilltop in 1974. The small settlement shows some plan of a round and a rectangular structure. An enclosure wall built of rough

stones went around the whole settlement (Figure 11). Surface finds consisted of EB II-III sherds only, all plain, dark grey to black without any incised decoration. Naxcevan handles were also found.²⁰

Yanik Tepe (37°58'50.82"N, 46° 0'13.00"E)

There has always been a discussion how to interpret the big wall stub at Yanik Tepe.²¹ Is it fortification wall or did it serve another purpose?. With the other evidence for enclosure or fortification walls presented here it could be that Yanik Tepe was enclosed by some kind of defensive perimeter wall.²²

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¹⁸ Bibliography: Kroll 1984: 21, Abb. 1, Taf. 2, 1.

¹⁹ Bibliography: Kroll 1984: 29; Kleiss 1975: 27–28, Abb. 3, Taf. 4.1.

²⁰ Bibliography: Kleiss 1975: 69, Abb. 20, Taf. 11,2; Kroll 1984: 32.

²¹ Burney 1971: 60.

²² Summers 2013: 173, Figure 9, 1 who does not think it was a fortification wall.

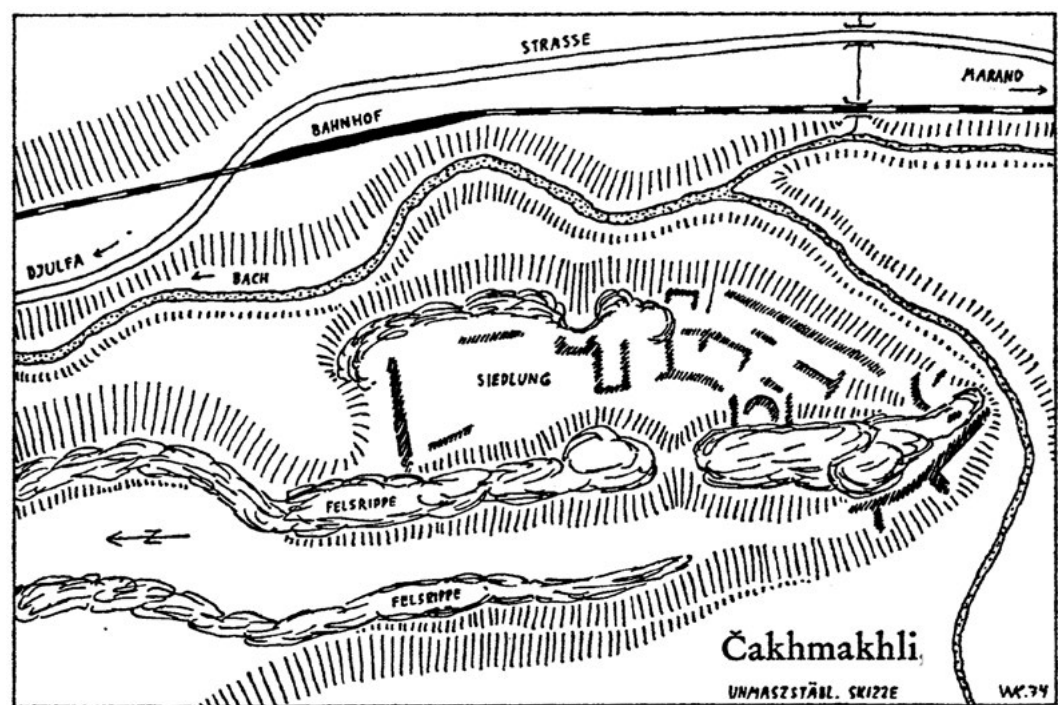


Figure 10: Sketch plan of Çakhmakhli Qal'eh (courtesy of W. Kleiss).

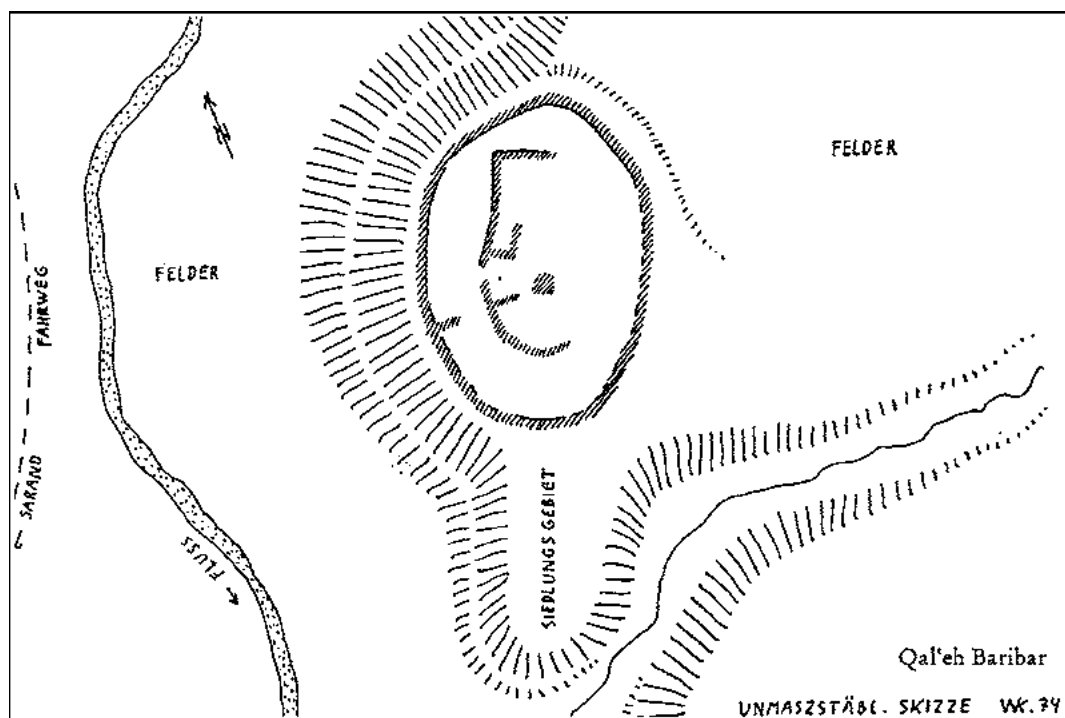


Figure 11: Sketch plan of Baribar Qal'eh (courtesy of W. Kleiss).

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From Aramus to Sevaberd, on the Gegham Mountain Route

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Abstract: From a historic-contextual view the fortress of Aramus can be considered the oldest Urartian foundation in modern day Armenia marking therewith a significant step towards the conquest but also cultivation of the Ararat plain by the kingdom of Urartu in the very beginning of the reign of king Argishti I. Moreover, this foundation turned out to be also a decisive step toward the further expansion of Biainili across the Gegham mountain range to Lake Sevan to both exploit the rich resources and hence control the main mountain roads across the Lesser Caucasus which required the establishment of a direct as well as defensibly mountain pathway from Aramus to Gavar across the Azhdahak volcanic massif. The foundation of the fortress of Sevaberd shows, that mountain ranges did not represent insurmountable obstacles but were likewise considered as reliable strategic links for a successful military expansion. The fortification infrastructure established by the kingdom of Urartu across the Gegham mountain subsequently served as basis for the renewal of this strategic route to connect the fertile regions on both sides of the Gegham mountain range.

Keywords: Urartu, Aramus, Sevaberd, Gegham, mountain route

We first met with Prof. Areshian on the excursion organised by the Institute of Archaeology and Ethnography of the National Academy of Sciences of Armenia in occasion of the celebration of its 50th anniversary in 2009.¹ On that occasion we had the pleasure to be introduced by Prof. Areshian and his team colleagues to the sensational success of their excavations in the Areni-1 cave complex which since then has become one of the most interesting sites for the research of the Late Chalcolithic Period in the South Caucasus.² The visit was followed by a ceremonial dinner directly at the foot of the entrance to this suggestive site. No less impressive was, however, the subsequent visit to the nearby Medieval monastery of Noravank where we had the opportunity to listen to a vivid lecture of Prof. Areshian about the history of this charming site and of the landscape of Vayots Dzor at that time governed by the Orbelean House.

We want to express our gratitude to Prof. Areshian for this unforgettable cross-section through the history of Armenia from the Chalcolithic to Medieval times. It is therefore with great pleasure that we join the congratulations in this *Festschrift* by dedicating him the following paper and by wishing him all success in his future works.

Similar to his lecture, the following paper attempts to present a short cross-section through the history of the fortress of Aramus and the landscape of the

Kotayk Plateau,³ where the University of Innsbruck is conducting archaeological research in cooperation with the Yerevan State University and the Institute of Archaeology and Ethnography since 2004, by focusing on the results of the investigation recently conducted at the fortress of Sevaberd.

On this basis it is argued that at least at three periods, in the period of the kingdom of Urartu, in the Early Medieval period and in the period of the Erivan Khanate, a major overland route was established across the Gegham mountain range passing via the Kotayk Plateau and the Azhdahak volcanic massif which connected the areas of Yerevan and the southern coastal region of Lake Sevan where it eventually joined, near Martuni, both the route to Vardenis⁴ and on, down the valley of the Tartar River, to Partaw (Barda) into the Kura Valley as well as the route across the Selim Pass to Vayots Dzor (Figure 1).

Certainly, several paths were used since immemorial time to cross the Gegham mountain range which at least as early as the obsidian and mineral deposits of the Kotayk region were exploited developed to paths with interregional significance.⁵ What we are more interested in elucidating in this paper is hence, the use of this path network for political aims and thus the

¹ The proceedings are published in Avetisyan and Bobokhyan 2012.

² Areshian *et al.* 2012; Wilkinson *et al.* 2012.

³ For the geographic definition of the Kotayk Plateau used within the Project Aramus Excavations and Field School see Kuntner *et al.*, forthcoming b.

⁴ For a recent general overview of the archaeology of this region see now Meller and Avetisyan 2011; 2013.

⁵ Badalyan *et al.* 2004; Bobokhyan *et al.* 2014; Chataigner *et al.* 2003; Gevorgyan and Bobokhyan 2014.

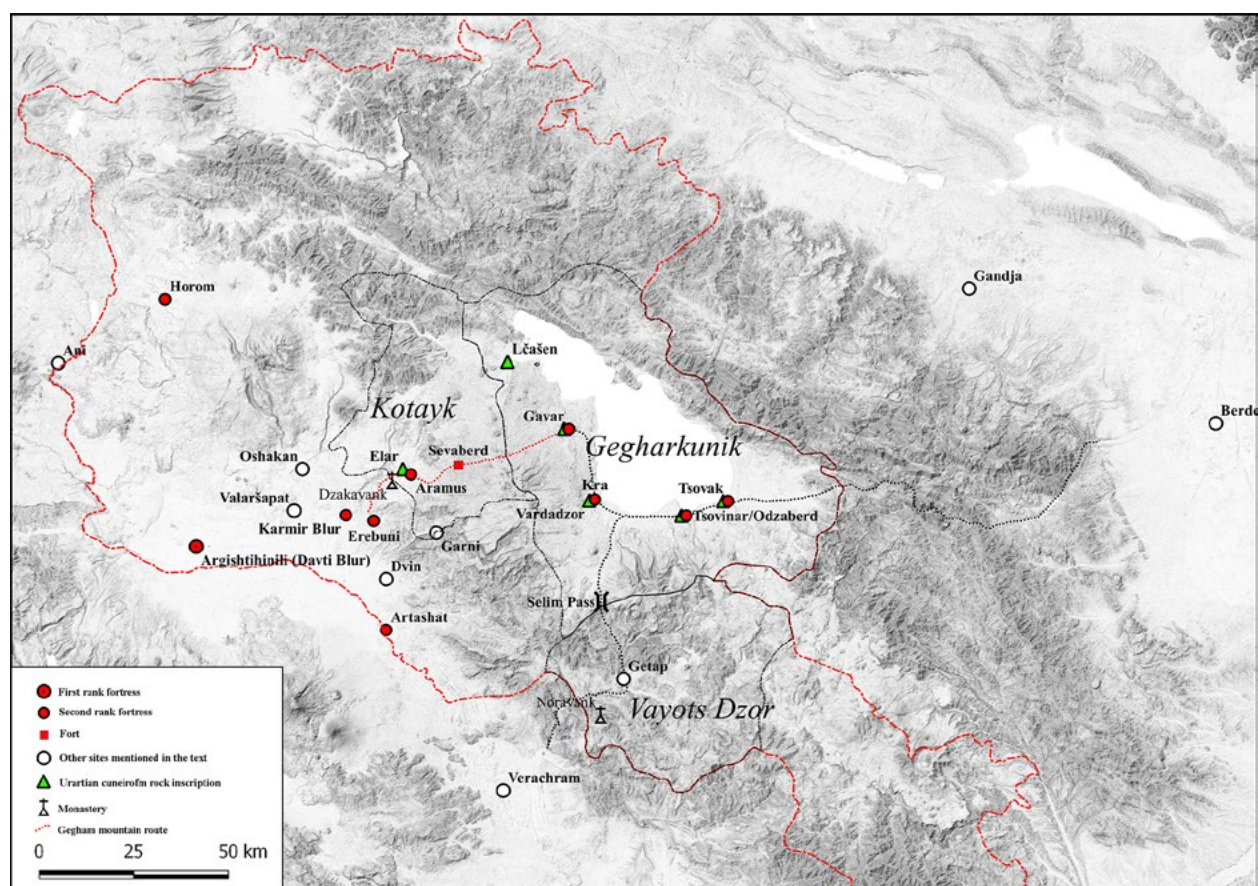


Figure 1. Map showing the main sites mentioned in the text and the pathway of the Gegham mountain range (map data: MapSurfer. NET)

establishment of one specific route, here in after termed Gegham mountain route, fortified with strongholds to secure and control the crossing between the Ararat Plain and the basin of Lake Sevan.

For the above-mentioned Medieval context, the existence of such a route can be inferred from the accounts of the Armenian historian Step'anos Orbelean. In his description of the patrimony given to Liparit Orbelean by the *atabek* Ivane Mkhargrdzeli in 1223 CE the historian mentions besides villages located in Vayots Dzor and Gegharkunik also villages located in Kotayk and here in particular around Elar.⁶ In the same respect, the existence of a major direct communication route might be reasonably assumed also for the period of Shaddadid rule over Armenia whose capitals of the 10th to 12th century CE were Dvin and Gandja.⁷

The maintenance of the fortification infrastructure was closely related to the existence of a major political centre at its point of origin, the Ararat Plain. In this context it is interesting to note that the shift of location of such centres, for example from Artaxata to Dvin and

finally to Ani, only minimally influenced the course of the Gegham mountain route. In the particular case of Dvin the Azat River Valley would have provide a much shorter track to the Gegham passes. The current evidence of the distribution of strongholds along the western slopes of the Gegham mountain range indicates, however, that the Kotayk Plateau was again preferred and the Gegham mountain route accordingly joint nearby Kamaris from Garni/Dvin via the fortresses of Hatsavan and Dzoraghbyur, despite the topographic and distance disadvantages (Figure 2).

Other motivations than time and cost accountings must thus have played a role when in the Early Medieval period and in the period of the Erivan Khanate the Gegham mountain route was rekindled via the Kotayk Plateau. Most likely this role was played by the existing military infrastructure, albeit partly dilapidated, whose origin can traced back to the Middle Iron Age and more specifically to the reign of king Argishti I on the basis of the date of the fortification system of Kotayk Plateau.⁸ But again, the location of that time political centres at Erebuni and Karmir Blur did not necessarily require to determine the route to Lake Sevan via Aramus and

⁶ Step'anos Orbelean, 189 and 205.

⁷ Manandian 1965: 159-161.

⁸ Kuntner *et al.*, forthcoming a.

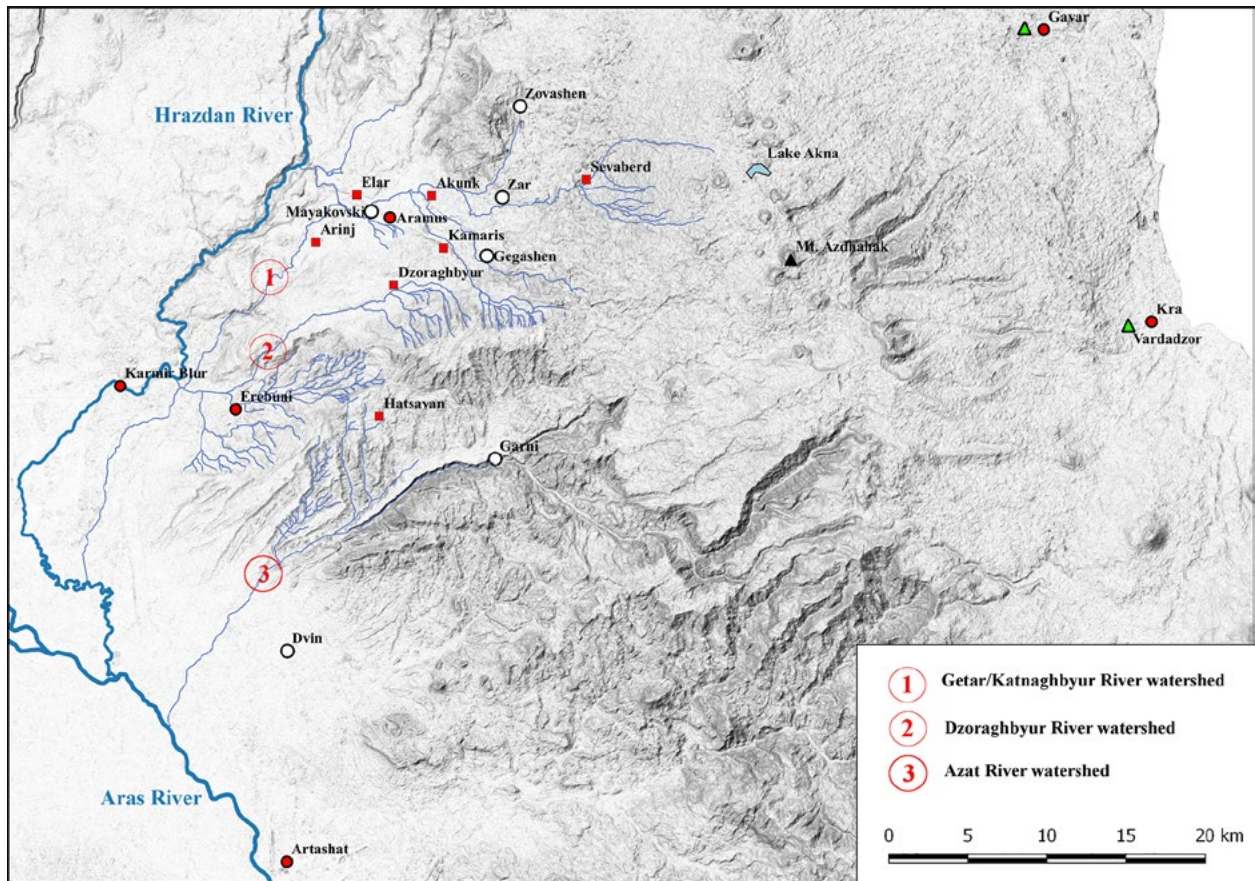


Figure 2. Map showing the Kotayk Plateau and the watersheds of the main rivers (map data: MapSurfer. NET)

the Kotayk Plateau. We have, therefore, to look for other reasons to explain the emergence of the Gegham mountain route along this specific pathway.

In the following first section, we attempt to propose an answer for the development of the Gegham mountain route by analysing the historical spatial relation between the fortresses of Aramus and Erebuni. According to the classification recently proposed by Biscione and Dan both sites belong to so-called second rank fortresses.⁹ If we consider the geographical distribution of all nine second rank fortresses in Armenia a pathway soon become apparent: In its centre is the fortress of Armavir/Davti Blur, the only first rank fortress in Armenia, from where originates both a northern route to Horom and the Javakheti Plateau and a eastern route to Karmir Blur/Erebuni where it splits into the Ararat Plain route to Artashat and further to Verachram and into the Gegham mountain route via Aramus, Gavar, Kra, Tsovinar (Odzaberder) and Tsovak.¹⁰

⁹ The perimeter of the fortress of Aramus measures approximately 1100m and belongs, therefore, contrary to the estimate of Biscione and Dan (2011: 107) to one of the largest representatives of second rank fortresses in Armenia.

¹⁰ Biscione and Dan (2011: 111-112) suggest to reconstruct the pathway from Sevaiberd to Gavar via the fortress of Arvuyti Dasht/

The concentration of three fortresses, Karmir Blur, Erebuni and Aramus which respectively represent new Urartian foundations around the basin of modern day Yerevan is remarkable.¹¹

In the second section, we will present the results of the architectural investigations conducted at Sevaiberd on which the dates for the establishment and the resumptions of the Gegham mountain route are ultimately based. The question how long the route remained in use in each case will not be attempt here, as this issue requires more comprehensive archaeological research for a reliable contextualisation of the extant historical sources.

The fortress of Aramus as the centre of Argishti's I water management project for Erebuni

The fortress of Aramus lies in the midst of the Kotayk Plateau on a maximum altitude of 1495m a.s.l. along the paved road between of the eponymous village and the village of Mayakovski (UTM 38T: 470413. 55m E - 4455439. 67m N). The fortress was founded by the

Yonjalekh. For the later see Mikayelyan 1968: 29-30, Figure 50-51.

¹¹ Yesayan 1969: 61-109.

Urartian king Argishti I. in the first quarter of the 8th century BC¹² in close connection with the foundation of Erebuni located 15km south-westwards of Aramus on an altitude of about 1060m a. s. l. at the south-eastern outskirts of modern day Yerevan. The interrelationship between Erebuni and Aramus is based both on historical-political issues emerging from the comparison of the cuneiform rock inscriptions of king Argishti I and on considering the hydro-topographic conditions of the Kotayk Plateau.

For the historical-political aspect we have to start referring to the so-called Elar inscription as it allows to place the fortress of Aramus in a clear geographical context. The inscription was found in situ on a rock face of the small gorge extending immediately south of the fortress of Elar.¹³ It reports the victory of the Urartian king Argishti I (785/780-756¹⁴) against ^{KUR}Etiuni¹⁵ and of the conquest of the land ^{KUR}Uluani described to have belonged to the city of ^{URU}Darani.¹⁶ As a result a certain identification of the toponyms ^{KUR}Uluani and ^{URU}Darani respectively with the Kotayk Plateau and the site of Elar can be assumed. Consequently, it can be inferred that the fortress of Aramus was founded by Argishti I to control the newly conquered region of ^{KUR}Uluani.¹⁷

The annals of king Argishti I at Van Kalesi/Tushpa, known as the Horhor Inscription, mention on the other hand ^{KUR}Uluani within a broader context of raids against ^{KUR}Etiuni in the 2nd regnal year¹⁸ thus providing a chronological context for the event described in the Elar Inscription as well as a valuable cultural and historical reference for the foundation of the fortress of Aramus. In the following year we are told that Argishti I inflicted a major defeat to the land of ^{KUR}Ḫate. The year

after, in his 4th regnal year, we see the Urartian army again involved against Etiuni. This time the annals report of the conquest of the city ^{URU}Qihuni and of the land ^{KUR}Siluni, located next to the sea, and that the raid ended nearby the city of ^{URU}Alištu.

Whereas the precise locations of the cities ^{URU}Qihuni and ^{URU}Alištu are debated it is on the other hand generally accepted that the sea mentioned in the Horhor inscription cannot be other than Lake Sevan. This attribution is thereby mainly based on the identification of ^{URU}Qihuni with ^{URU}Qieḫuni mentioned in the Lchashen inscription¹⁹ still located in situ at the north-western corner of Lake Sevan and therein described to have been located next to the sea.²⁰

The submission of the major Etiunian centres in the Hrazdan valley culminated thereupon with the deportation of men and women from these regions and finally, 'for the humiliation of its enemies', with the foundation of Erebuni where 6600 deported 'men of battle' from the preceding campaign against Ḫate and Şupa were resettled.²¹ In the stela of Surb Sahak²² as well as in the foundation inscriptions of Erebuni²³ Argishti I proudly states that the ground of Erebuni was deserted and that nothing was constructed here before. Finally, he states 'great deeds I accomplished there'.

Notwithstanding the fact that in contrast to the foundation of Argishtihinili six years later no notice is given at Erebuni of the construction of an irrigation canal and of the setting up of vineyards and orchards,²⁴ it is nevertheless conceivable to assume that comparable deeds were accomplished also at Erebuni. In particular, as we know from inscriptions of Argishti I,²⁵ of his successor Sarduri II²⁶ and of Rusa Erimena²⁷ that several silos have been constructed at Erebuni for the storage of crops. Moreover, the finding of a piece of a stone water pipe at Erebuni, now stored at the site's museum,²⁸ strongly argues in favour of the existence of an artificial water network at least for the drinking-water supply of the citadel of Erebuni.

The consideration that the construction of such a water network system might have been understood by Argishti I among the great deeds accomplished by him at Erebuni comes spontaneously.²⁹ In this regard, the hydro-topographic conditions of the region of Erebuni

¹² This attribution, initially based on the proximity of the fortress of Aramus to the Elar inscription, can now be confirmed by both archaeological evidence and by radiocarbon dates (Kuntner *et al.*, forthcoming b).

¹³ Khanzadyan 1979: 162. A picture of the location of the inscription is published in Nikol'skij 1896: Table XXIV, and a description of the find spot is given by Sandalgian 1900: 137. Compare also König 1955: 16. Salvini (2008: 348) erroneously locates the Elar inscription somewhere along the paved road from Yerevan to Abovian while presuming that the removal of the inscription occurred while the construction of the paved road before 1968. The destruction of the inscription has rather to be related to the construction of the industrial complex on the hill opposite to Elar.

¹⁴ For absolute dates see Salvini 2002: 59; Fuchs 2012.

¹⁵ For Etiuni see Areshjan 1977; Taffet and Yakar 1998.

¹⁶ CTU A 8-8. Here and in the following the citation of the Urartian inscriptions refers to Salvini 2008.

¹⁷ The best comparative example is the foundation of Seqendel by Sarduri II opposite to the Early Iron Age fortress Libliuni. For the archaeological evidence see Kleiss and Kroll 1980. For the textual evidence see Salvini 1982.

¹⁸ CTU A8-3: I 24-25. On that occasion Argishti I states to have conquered also the lands of ^{KUR}Uria and ^{KUR}Ṭerşubi, the land of ^mMuruzuqai. Contrary to Salvini we regard Muruzuqai to be the name of a tribe rather than of a city. If we consider the direction of the campaign of Argishti I to Lake Sevan in his 4th regnal year, the toponyms ^{KUR}Uria and ^{KUR}Ṭerşubi may then be identified with the uplands of Mt. Hatis and of the Gegham mountain range which thanks to its many sources of water provide excellent pastureland.

¹⁹ CTU A 8-11.

²⁰ Salvini 2002: 40-43.

²¹ Çilingiroğlu 1983; Salvini 2011: 92.

²² CTU A 8-1 VO 20.

²³ CTU A 8-17A+B – CTU A 8-21.

²⁴ CTU A 8-15, CTU A 8-16

²⁵ CTU A 8-28A-E

²⁶ CTU A 9-20 – CTU A 9-24

²⁷ CTU A 14-6

²⁸ For a picture see Harutyunyan 2012.

²⁹ Aghakhanyan and Martirosyan 1984.

allow to take two possibilities into consideration: first, the river of the Dzoraghbyur headwaters which still today flows along the foot of the citadel of Erebuni has of course to be regarded as one of the major water sources. All the more as no extensive canalisation work is required for its exploitation. And indeed, there is strong indication for the control of the route from Erebuni to Aramus via Dzoraghbyur because of the remains of an Iron Age fortress near the fountainhead.³⁰

Secondly, the same holds true even more for the Getar River which rises between the opposite hillsides of the fortresses of Elar and Aramus nearby the find spot of the Elar inscription.³¹ There under, the fortress of Aramus, which covers an area of nearly 10ha whereas Elar is less than 1ha large, holds the more prominent role. The fortress of Aramus is situated on top of a 1km long and 300m wide ridge which largely borders the catchment basin of the Getar to the south. The paved road which nowadays circularly connects the villages of the Kotayk Plateau roughly shows the edge of the moistly depression in medieval times.³² The alignment of respectively chronologically consistent archaeological sites around the basin evinces, moreover, that this edge is just the last step of a gradually desiccation of a lake or at least marshland which in the Palaeolithic period must have been considerably more extended.³³ For the Iron Age the shoreline can tentatively be traced on the basis of the location of the fortresses of Elar, Aramus, Kamaris and Akunk. The volume of water provided by the Getar River, officially termed as Katnaghbyur branch, can best be exemplified by the fact that its headwater represents today one of the major drinking-water sources of Armenia's capital Yerevan.³⁴

The advantages of the Getar River over the Dzoraghbyur River are twofold. First, the topographic conditions of the Kotayk Plateau permit to dam the Getar with little

effort by benefiting of the wide natural depression in the middle of the Kotayk Plateau, and secondly and maybe more decisive, to irrigate also the extended plain territory of nowadays Yerevan and especially of the northern regions now occupied by the city quarters of Avan, Kanaker-Zeytun and Arabkir, which are, moreover, perfectly protected by the deep gorge of the Hrazdan River from enemy raids from the north-west. Hence the fortification system of the Kotayk Plateau secured 'Erebuni's granary' from the north-east as did Erebuni and Karmir Blur from the south.³⁵ The favourable natural conditions which permitted to irrigate this vast territory without the elaborate construction of canals might partly explain the silence in Argishti's inscriptions. The choice to start the takeover of the lands north of the Araxes River, the ^{KUR}Etiuni of the Urartian inscriptions, in the estuary of the Getar and Dzoraghbyur Rivers for sure was above all an 'ingenious deed'. It represented the first and decisive step towards the permanent control of the Ararat plain by the kingdom of Biainili.

In fact, meanwhile the construction of Erebuni and of the fortresses on the Kotayk Plateau advanced, there with providing the necessary backing for the foundation of Argishti-inili six years later, the main targets of Argishti's army laid after the foundation of Erebuni in the south, against Assur, in the struggle for spheres of influence over the territories around Lake Urmia in north-western Iran.³⁶ It is only in response to the hostile raid of Etiunian tribes to Ardini/Musasir that the military operations north of the Araxes River were again resumed by Argishti I in its 12th regnal year.³⁷ However, these military operations were now focused mainly on the Shirak Plateau.

The military importance of the fortress of Aramus seems, therefore, to have developed during the reign of Sarduri II and his son Rusa I and stands in close relation with the subjection of the south-western coastal regions of Lake Sevan. The reconstruction of the Urartian advance into this region has traditionally been based on the location of the rock inscriptions whose alignment from north to south does indeed more or less comply with the chronological order of their making.³⁸ These are the already mentioned Lchashen inscription of Argishti I (CTU A 8-11), the Adamhan inscription of Sarduri II near Vardadzor, and finally the Tsovinar inscription of Rusa I. located at the foot of his newly founded fortress dedicated to the storm god. Exceptions to this rule are the rock inscription of Tsovak of Sarduri II still located in situ at the south-eastern coastline and

³⁰ Personal communication of Hayk Avetisyan

³¹ The outflow of the Getar starts today nearby the village of Mayakovski and is largely channelled underground from Balahovit onwards. The overflow is diverted from here to Getamej where it empties into the Hrazdan river. This area was, however, strongly reshaped since the end of the 19th century for the construction of industrial and agricultural facilities as well as for the enlargement of the villages of Nor Gyugh, Akunk, Aramus and especially of Mayakovski into the basin depression which was intensively drained for this purpose in Soviet times.

³² The excavations conducted by Annegret Plöntke-Lüning in 2008 and 2009 immediately east of the Tsiranavor church in the village of Aramus ascertained waterlogged deposits at a depth of 1440m a.s.l. This level lies approximately 3m below the floor of the 7th century church. The waterlogged deposits are superimposed by occupational debris dating at the earliest from the 16th century. The upper meter represents a Soviet time levelling most probably filled in the course of the massive drainage of the basin, as reported by the local farmers, on which the village was subsequently extended. A shallow sloping is evident in the terrain between the old and the new village parts.

³³ Personal communication of Boris Gasparyan.

³⁴ Yerevan Water and Wastewater Project 2004. Noteworthy, mudflows of the Getar River have repeatedly caused severe damaged at Yerevan (Vardanian 2009: 221).

³⁵ The function to be Yerevan's granary was reassigned to the villages of the Kotayk Plateau at the latest under the Qajar rule in the 18th century CE again (Bournoutian 1992: 38).

³⁶ Salvini 2001; 2005.

³⁷ CTU A 8-3 V: 41-46.

³⁸ Salvini 2002: esp. 57-58.

only partially, as its finding context is not fully clear, the stone inscription from Nor-Bayazet (Gavar) of Rusa I.³⁹ However, a significant concentration of inscriptions can be identified along the south-western edge of Lake Sevan.

The underlying idea of this methodological approach in the reconstruction of Urartian advance is the supposition of a progressive conquest of the coastal regions of Lake Sevan from north to south.⁴⁰ This idea is thereby fundamentally based on the location and date of the Lchashen inscription in as much as it is postulated to mark the gateway to the region of Lake Sevan.

But this last pivotal argument is neither tenable from a historical nor archaeological point of view. The expedition to the cities of ^{URU}Qi(e)ḫuni and ^{URU}Ištikuniu or/and ^{URU}Alištu dates according the Horhor and Lchashen inscriptions to the 4th regnal year of Argishti I which is conventionally dated to 782 BCE. The conquest of the royal town of Tuliḫu by Sarduri II mentioned in the Adamhan inscription near Vardadzor dates on the other hand 'immediately or shortly after 754' BCE.⁴¹ The lapse of time of approximately one generation between these military operations is in our opinion too long to suggest that the 'gateway' to Lake Sevan could be kept firmly under control. Especially as we know that Biainili's army was engaged in North-Western Iran and later in the Shirak Plain. Even if we consider that the fortification system of the Kotayk Plateau was operative for this special purpose since its establishment there is no archaeological evidence for an active military presence of the kingdom of Urartu in the region between Aramus and Lchashen strong enough to secure the approximately 40 km long plateau traverse.⁴²

At nearly the same distance as from Aramus to Lchashen lies across the Gegham mountain range the Adamhan inscription, hence half the distance than way round via Lchashen. The time-cost effectivity of the shorter route over the Gegham range is indeed reduced by the height difference of nearly 1000m, a circumstance which is especially exacerbated in early spring and late autumn. The greatest advantage of the shorter route has therefore to be seen most probably in a lower enemy resistance because of its remoteness but at the same time also nearness to the military operation centre at Aramus. All the more, as soon as the pass roads were

firmly controlled by forts reachable within one day's march from Aramus and its satellite forts.

Several surveys have been conducted on the Kotayk Plateau as well as across the Gegham mountain range as early as the pioneering reconnaissance works of Bayburtyan in the 1920s and thereafter continued by different teams and individual scholars.⁴³ Most of the data remained, however, unpublished and only very schematic maps have been released so far. The survey activity conducted within the Armenian-Austrian project 'Aramus Excavations and Field School' on the Kotayk Plateau does therefore not aim in the first place to find new sites but to improve the mapping and recording of the already known sites in particular dating from the Iron Ages to Medieval times. This is the period corresponding to the occupation of the fortress of Aramus as the main object of research of this international cooperation.

The general picture emerging from our investigations which in 2014 and 2015 were focused on the western slopes of the Gegham mountain range around the villages of Gegashen and Zar and in particular on the fortress of Sevaberd reveals a shift of the occupation density from the northern to the southern tributary of the Getar River. Whereas, namely, the area of Zar is mainly characterised by Bronze Age cromlechs and at least two opposite located Iron Age fortresses along the ascent from the basin to the plateau between Zovashen and Sevaberd, the area of Gegashen showed a markedly stronger presence of medieval and recent settlement remains. This shift of occupation density is tentatively interpreted as evidence for a simultaneous shift of the ascent route to the passes of the Gegham mountain range from Zar to Gegashen. While Kamaris remained the fore last station before the ascent it seems on the other hand that Sevaberd did time and again lose its strategic importance whereas remaining a significant topographic reference point. This inference is based on the results of the archaeological and architectural documentation of the fortress of Sevaberd as well as on the cartographic evidence of the 19th century.

The fortress of Sevaberd as the base camp for the crossing of the Gegham passes

The fortress of Sevaberd formerly called Kara Kala, the black fortress, is registered in the '*List of the Immobile Monuments of the History and Culture of the Republic of Armenia*' released in 2003 under the No. 6.61. The list classifies the monument as a 3rd to 2nd millennium fortress with an Early Medieval re-use. No excavation has been conducted so far. It has to be anticipated that

³⁹ For a detailed description of the finding spot of the corner stone inscription see König 1955: 23.

⁴⁰ Salvini 2002: 57.

⁴¹ Salvini 2002: 47.

⁴² Similarly argue Biscione and Dan 2011: 111-112. Evidence for an Urartian site north of the so-called Dovri-Aramus line was recently reported in Petrosyan *et al.* 2015: 65-67. How strong the Urartian presence has been, is, however, still questioned (2015: 61).

⁴³ Recently Early Iron Age and Medieval ceramic fragments were found by Artak Gnumi of the Yerevan State University (Personal communication of Arsen Bobokhyan).



Figure 3. Satellite imagery of the fortress of Sevaberd (map data: Google, DigitalGlobe 2016)

this classification is only partly correct and that it thus fails to recognise the importance of the fortress of Sevaberd.

The fortress is located to the south-west of the village of Sevaberd on an altitude of 2070m a.s.l. (UTM 38T: 482768. 98m E - 4457791. 26m N). It is easily accessible by a trail which leaves the paved road from Zar at the entrance to the village of Sevaberd to the south from where it leads to the approximately 700m distant water reservoir (Figure 3).

The fortress of Sevaberd is situated halfway this trail in a shallow slope depression but deep enough to hamper the distant view over the Kotayk Plateau. It is thus suggested that this location was primarily chosen in order to be protected from the dry and cold down winds rather than to be suitable for observation. The shallow depression is formed by the riverbed of the main outflow of the crater lake Akna located nearly 10km upslope at the mountain pass across the Gegham mountain range at an elevation of 3032m a.s.l. In this depression converges also the main erosion-gully which drains the melt water from the western slopes of Mt. Azhdahak. From here the water masses, which represent the main tributary of the Getar River, flow through a deep valley down to Zar and then further to Akunk where they finally empty into the basin

depression northeast of Aramus after a flow distance of about 8km.

The fortress of Sevaberd was founded on a rocky hilltop measuring approximately 180×160 m in width. The hill rises only slightly from the slope and is largely covered by a stone field of clear volcanic origin which extends 300m upwards till the village outskirts. Undoubtedly, the stones for the construction of the fortress were quarried on the spot.

The ground plan of the fortress consists of two wards, inner and outer, each encircled by a curtain wall with exterior perimeters of respectively about 200 and 340 metres. The masonry is entirely made of rubblework consisting of an inner and an outer shell and a rubble infill which is mostly well stacked but in no case just randomly dumped in. No use of any kind of mortar was ascertained (Figure 4).

The masonry shells are just one stone strong and hence generally less than 50cm thick. The thickness of the curtain walls varies considerably along their length, though less because of the irregular terrain than because of the several repairs and reconstructions observable in the masonry of the curtain walls which were severely affected by earthquakes occurred over time.⁴⁴ Seismic

⁴⁴ Ambraseys and Melville 1982: 37-39. For a comprehensive catalogue

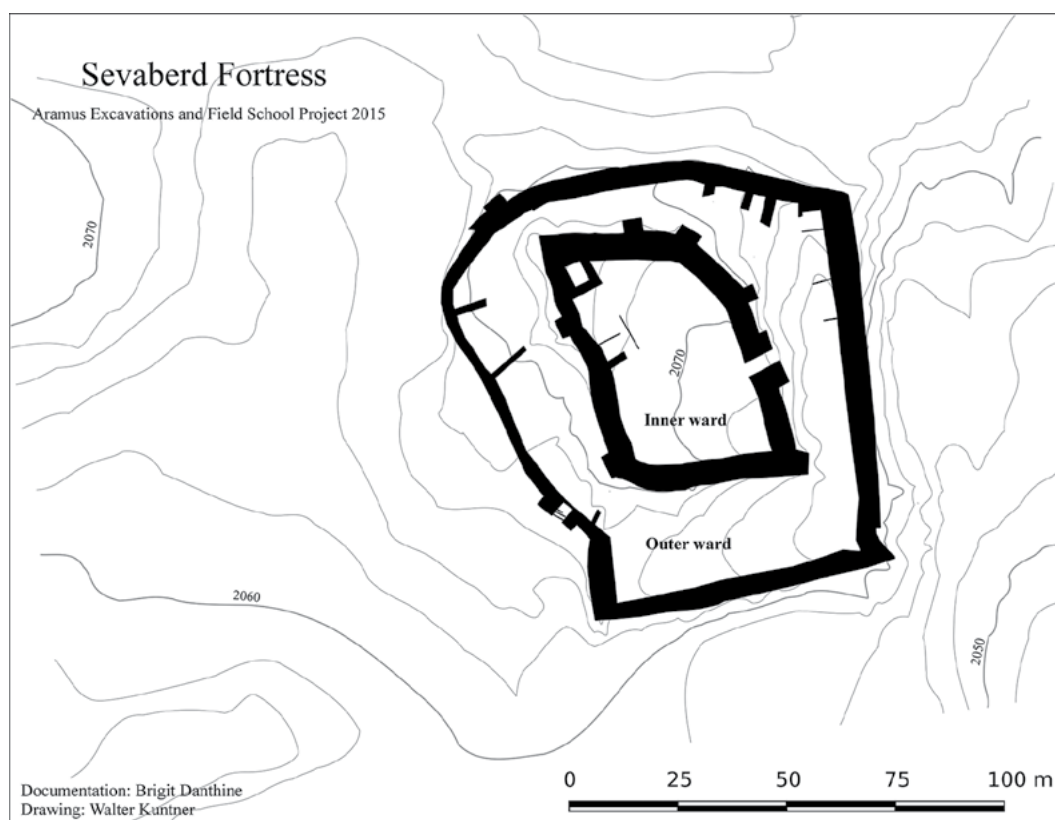


Figure 4. The ground plan of the fortress of Sevaberd

forces can reasonably be held responsible also for the many wall bulges and collapses. The average width of the curtain walls is some 4.50m and certainly, has to be seen as a measure to ensure the static resistance of the masonry against tremors rather than as a fortifying necessity.⁴⁵ Exceptions in regard to the wall thickness are the eastern and partly also the western sections of the outer curtain wall. Their average widths are 5.50 and 3.50 metres respectively. Because of the regularity, these findings are considered to reflect new building phases rather than to be the result of repair works.

The detailed study on site of the building techniques used to build the rubble walls revealed partly subtle and partly considerable differences in the masonry construction. These findings are enhanced by the documentation of building, in particular walled up gates, and architectural features, namely towers and the above mentioned wall thicknesses. These results enable to draw conclusions on the development of the ground plan and, by taking into consideration the surveyed pottery, also on the date and history of the fortress of Sevaberd.

Based on this classification a periodization in four construction periods I to IV is suggested. The oldest construction period I comprises thereby the foundation of the fortress. Only very few remains of this initial fortress are preserved or visible today. This is because the structures have been heavily dismantled and overbuilt in the following construction period II. Judging from the pottery evidence, it seems that the original fortress had remained abandoned for a long time falling into more and more disrepair before the construction of the new fortress, this is the fortress visible for us today (Figure 5).

The most relevant building feature of construction period I is tower I located at the north-west corner of the outer curtain wall. Tower I projects 1.40m and is 2.60m wide. This feature is in itself exceptional since the façades of this enceinte are otherwise thoroughly smooth. Determining is the evidence that this tower is related to an original gate of the outer curtain wall, hereinafter termed gate I. The inner doorjambs of gate I are relatively well preserved. The door width measures about 3.20m. The gate structures show a subtle but at the same time very characteristic difference compared to the construction technique of the adjoining rubblework and the masonry used later on to block the entrance of gate I. The difference lies in the accuracy

of large and strong earthquakes in Armenia see Haroutiunian *et al.* 1997; Pirousian *et al.* 1997; Shebalin and Tatevossian 1997.

⁴⁵ Individual extremes amount to 3.40 and 6.20 metres.

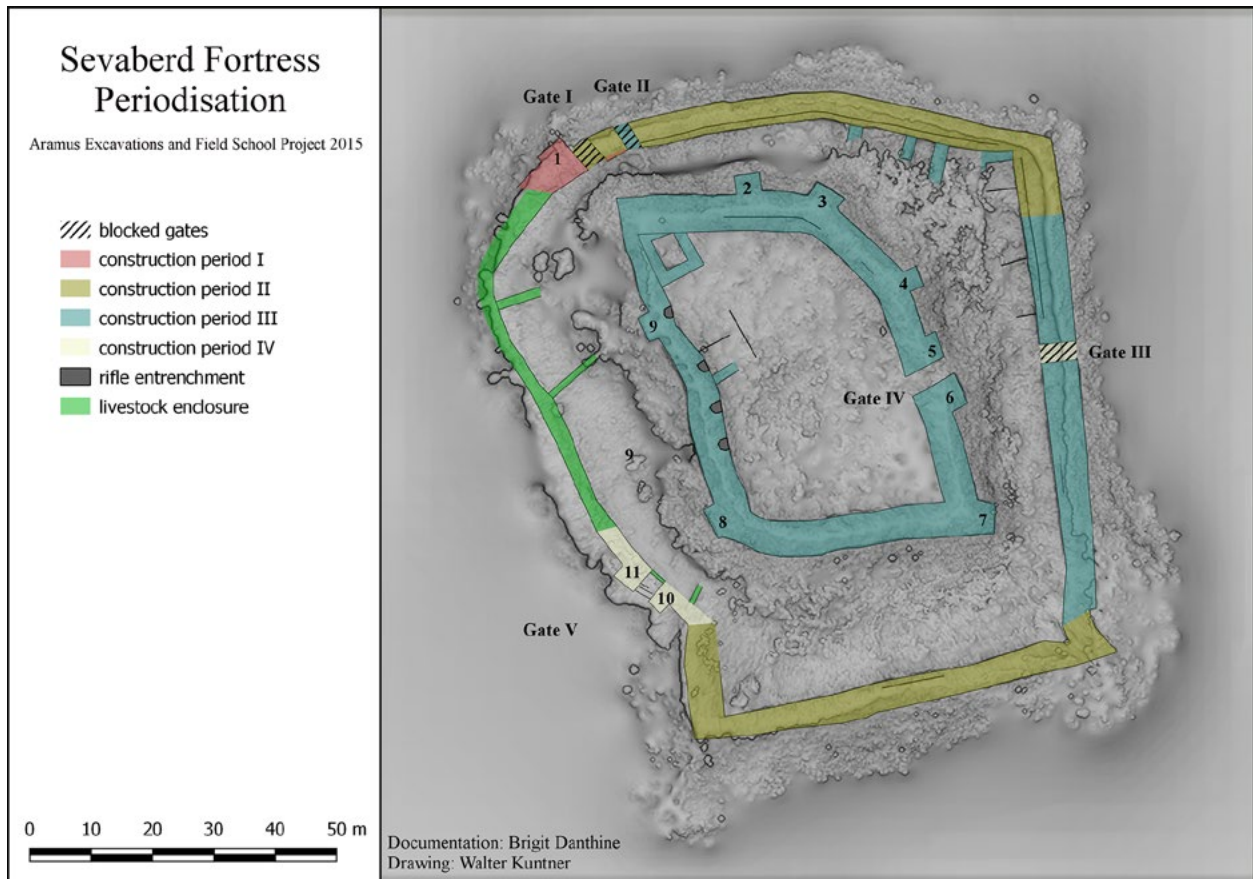


Figure 5. The period plan of the fortress of Sevaberd

of the construction work. The stones of the older rubblework are bigger and roughly hewn thus laying in more square courses with markedly smaller joints into which gallets were carefully clamped to better fix the stones one on another.

This type of stone work was nowhere found standing more than three or four courses high. The latter finding is especially well documented along the eastern wall section where a horizontal joint clearly divides the older from the younger rubblework of the construction periods II and III. This finding shows that at least some parts of the initial masonry were re-used and at the same time suggests that originally a superstructure made most probably of mud bricks rather than rubble stones was built on the rubblework of the construction period I. The masonry thus acted as a stone substructure. These building characteristics clearly favour, especially in view of the Iron Age pottery found in the stone debris of the fortress walls, a date into the period of the kingdom of Urartu (Figures 6 and 7).⁴⁶

⁴⁶ For a general discussion of the problematic of dating by reference to building techniques see Sanamyan 2002: 337, where the introduction of mud bricks for the construction of fortifications is confirmed to represent a hallmark of Urartian architecture.

The second and third construction periods are strongly related to each other both from an architectural as well as constructional point of view. This division is in fact based solely on the greater thickness of the eastern section of the outer curtain wall. As such this division might have a more structural than historic-cultural background. The pottery, for the most part collected in the stone debris in the outer ward, does not significantly contribute to a finer chronological assessment of these occupation periods but generally affirms the date from the 6th to 10th century CE which can otherwise be deduced from the architectural features and, no less, from historical implications (Plates I-III).⁴⁷

The use of rectangular towers and the absence of any kind of mortar in the masonry speak for a constructional date before the 10th century CE.⁴⁸ The increase of political weight of the villages on the Kotayk Plateau in the 6th to 8th century CE could perhaps provide a clue for the date of the beginning of construction period II.⁴⁹ This does not, however, allow to draw

⁴⁷ Babajanyan 2015; Kalantaryan 1970.

⁴⁸ Berkian 1976: 28-50, 229-231.

⁴⁹ According to Sebeos [91, 112] Avan and, though contradictory, to Step'anos Orbelean [50] also Aramus have been residences of the

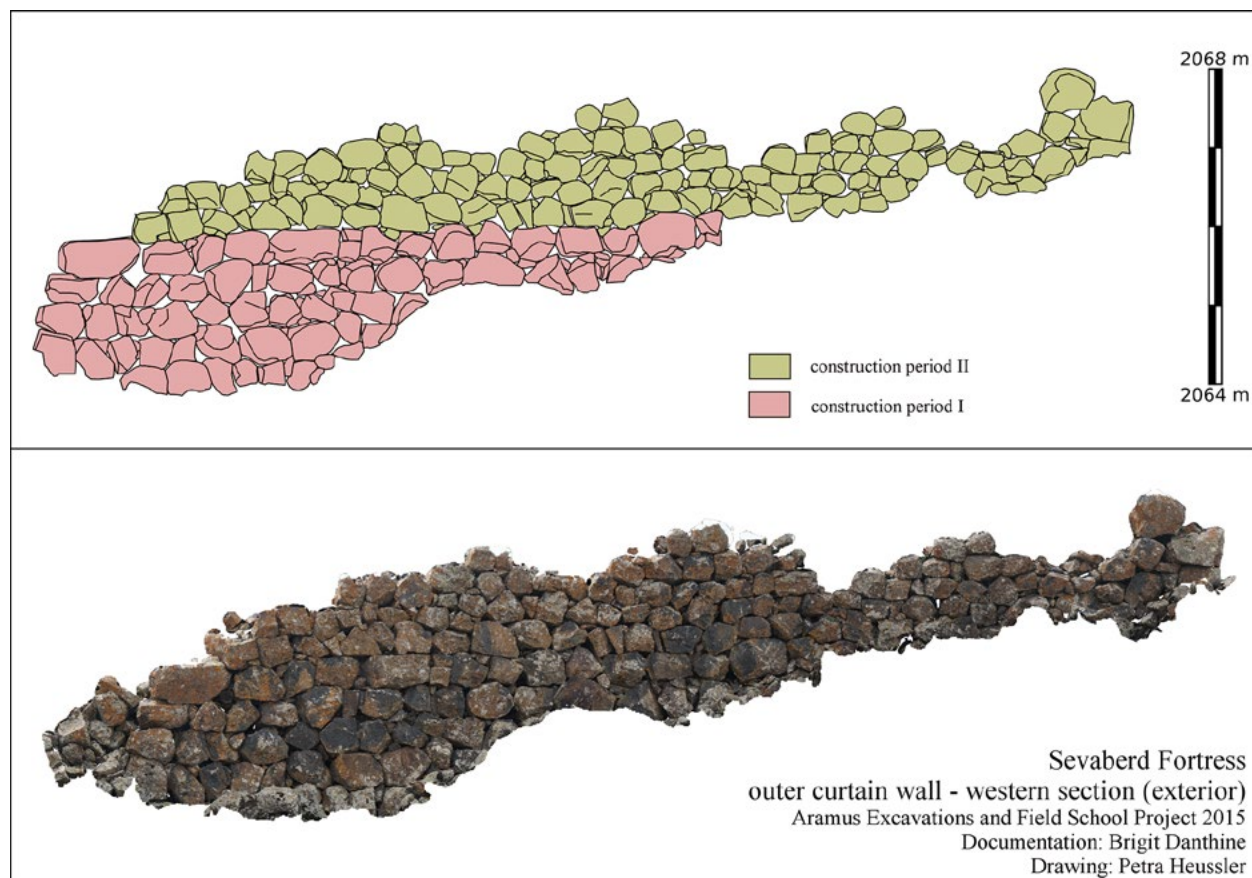


Figure 6. Detail of the north-east corner of the outer façade of the western section of the outer curtain wall of the fortress of Sevaberd with periodization of the construction

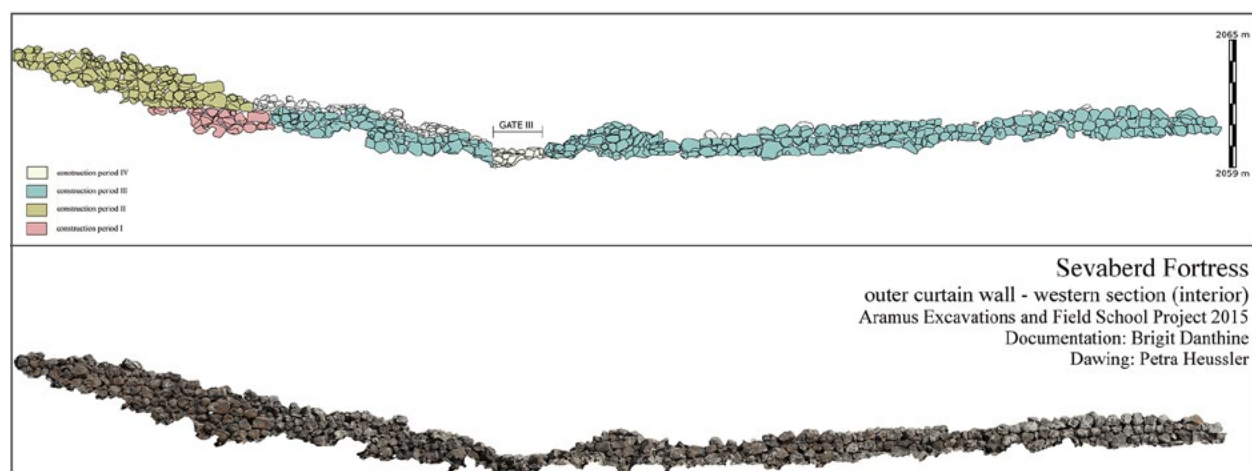
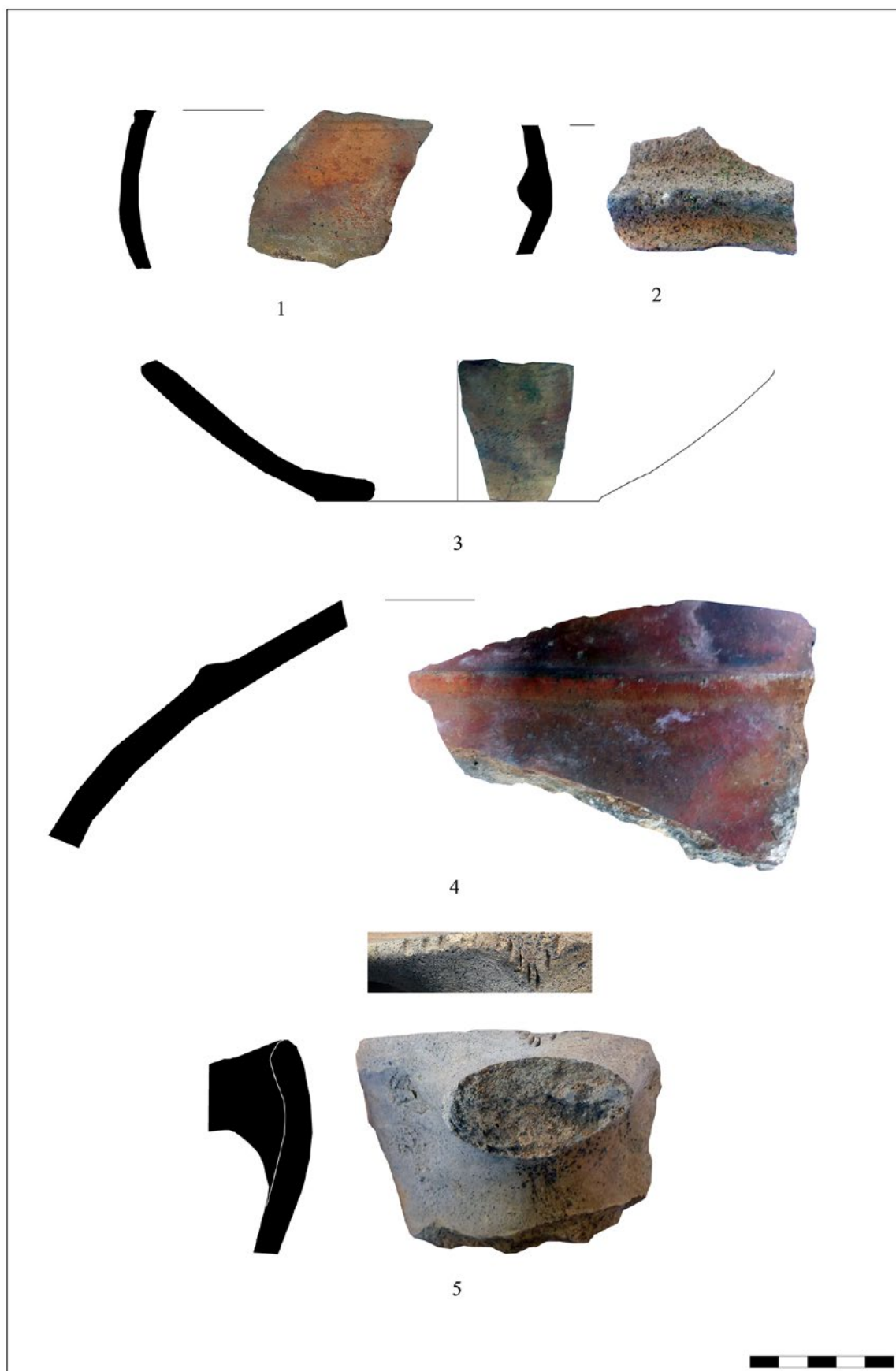


Figure 7. View of the the inner façade of the western section of the outer curtain wall of the fortress of Sevaberd with periodization of the construction.



Sevaberd. Fig.1-5. Scale 1:2

Plate 1

Nr.	Inv. -Nr.	Locus	Level	Diameter in cm	Description
1	S1	--	Surface	--	Middle fine clay, mineral temper O/C: 5YR 4/6 yellowish red I: 5 YR 5/8 yellowish red
2	S2	--	Surface	--	Middle fine clay, mineral temper, small stones Wheel markers O: 7. 5 YR 2. 5/3 very dark brown I/C: 2. 5 YR 2. 5/3 dark reddish brown
3	S3	--	Surface	9. 4	Fine to middle fine clay O: 10R 4/6 red I/C 10R 4/4 weak red Some parts of the sherd are fired with a different temperature
4	S4	--	Surface	--	Coarse clay, mineral temper, glimmer Smoothed, O: 10R 4/6 red I: 5 YR 4/4 reddish brown C: 5 YR 4/1 dark grey
5	S5	--	Surface	--	Middle fine clay, mineral temper, glimmer Decoration O: 7. 5 YR 4/1 dark gray I/C: 7. 5 YR 5/2 brown

also conclusions about how long the constructions remained respectively in use. By taking again Aramus as main chronological reference point the use of the fortress of Sevaberd could have likewise endured well into the 12th century CE.⁵⁰

In this light it is therefore more informative to describe the Medieval time construction periods together by focusing on the location shift of the gate of the outer curtain wall as one of the most notably architectural finding. The gate moved thrice, whereby only one gate seems to have been used in each case.

The original Iron Age gate I of construction period I might possibly have been repaired at the beginning of

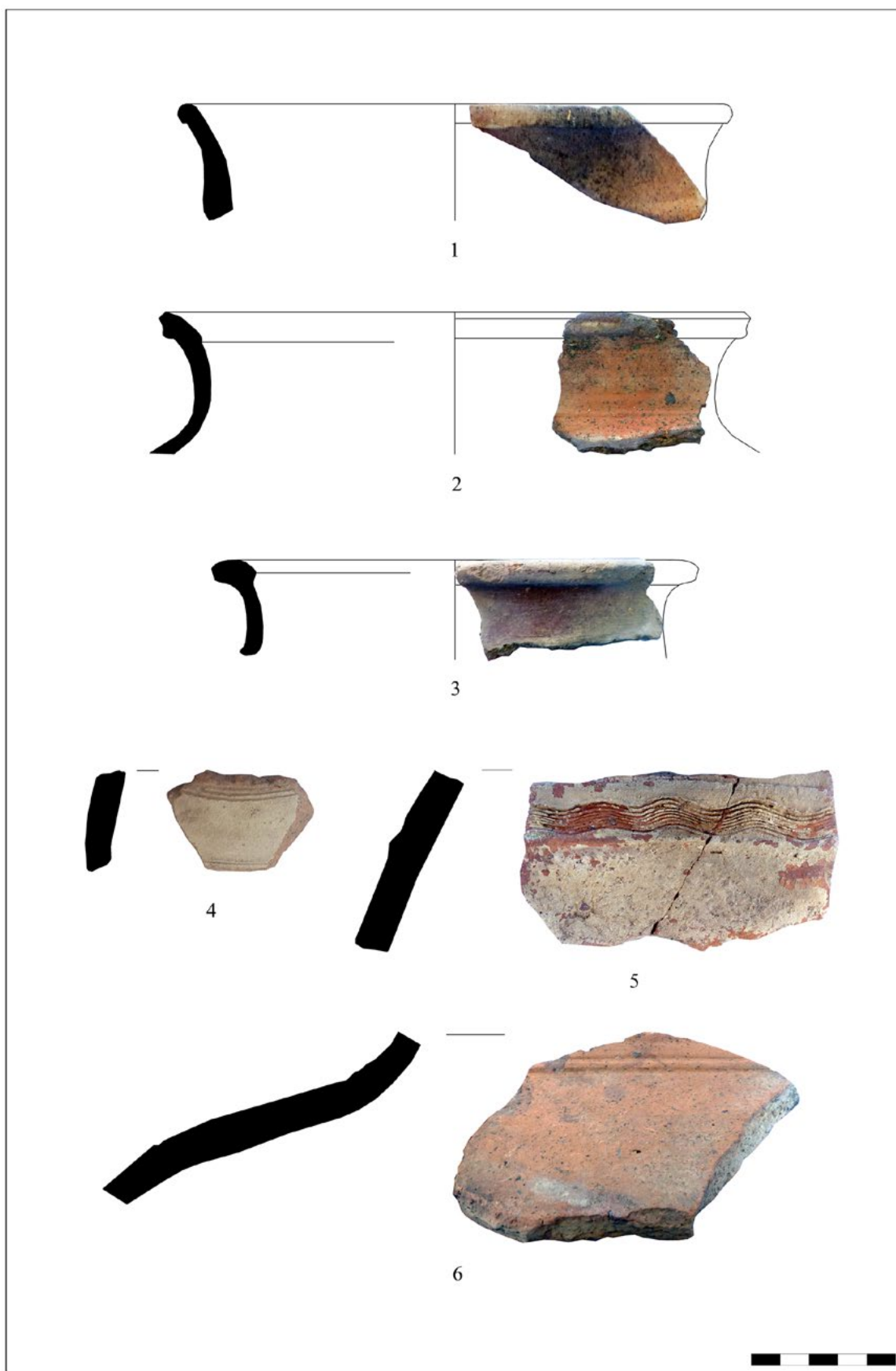
the construction period II. Soon after the eastern half of the door width was closed with masonry and later on completely walled up and a new gate, termed gate II, with a door width of 2m opened about 8m further to the east.

In any case, the outer curtain wall has been completely built anew in the construction period II. Only here and there were some better preserved wall sections of the original rubblework integrated or its hewn rubble stones re-used to build the new enceinte. In the latter case the distinction is not always easy to make. Good indications are, however, the wider joints with no or only the isolated use of gallets and in particular those instances where the hewn blocks are walled in sections otherwise made up of smaller stones piled one on another often without any offset. In these instances, however, often occur in the layering the use of tie and riser stones. This is not to say that this construction method was not practiced in the Iron Age too. But at that time the tie stones were laid more occasionally to bond the wall shell and the stone infill only at intervals. In the rubblework of the construction periods II and III several ties, and consecutively in the successive layer likewise risers, were laid next to one another within one and the same layer. Thus, although the younger rubble walls appear to be more rustic, basically their construction technique is more sophisticated.

Gate II at the northern section of the outer curtain wall was again walled up, most probably at the beginning of the construction period III, since the new gate III was repositioned approximately half way of the anew built eastern section. The gate III is located opposite to gate

Byzantine favourite to the Catholicosate Yovhan during the Second Council of Dvin in 554/5. The importance of Aramus is, however, confirmed by Yovhannes Drasxanakertc'i who reports that the patriarchal throne was moved from Dvin to Aramus during the Catholicosate of Dawit' I Aramonec'i (728-741) (Boisson-Chenorhokian 2004: 168). It is in this context tempting to assume, especially in regard to the amended fortification line of the Gegham mountain route via Garni to Kamaris since the 3rd century, that this line might have been a deciding factor for the demarcation of the border between Byzantium and the Sasanid Empire after the Byzantine-Persian War in 591 CE as described by Sebeos [84] (see also Greatrex and Lieu 2002: 174) which clearly favoured the victorious Byzantines for the defence of the newly conquered province of Ayrarat.

⁵⁰ The evidence for a medieval reuse of the fortress of Aramus is currently limited to the Ostburg. An overview of the exposed structures, defined as Period Ia, is shown in Kuntner and Heinsch 2010: 346, Figure 2. The date of Period Ia is based on three radiocarbon samples taken from graves G1-G3. The two older graves G2 and G3 dating to about the 9th to 10th century were found beneath the filling used to level the ground in the course of the reconstruction of the northern fortification wall. The younger grave G1 dating to the 12th century was sunken into the debris of this occupation. Moreover, in the debris was found an Early Christian cross-stone tentatively dated to the 6th century.



Sevaberd. Fig. 1-6. Scale 1:2.

Plate 2

Nr.	Inv. -Nr.	Locus	Level	Diameter in cm	Description
1	S8	--	Surface	18	Middle fine clay, mineral temper O/I: 2. 5YR 3/6 dark red C: 2. 5 YR 3/3 dark reddish brown
2	S7	--	Surface	19. 2	Middle fine clay, small stones, glimmer O: 5YR 4/6 yellowish red I: 5YR 4/4 reddish brown C: 2. 5YR 3/6 dark red
3	S 13	--	Surface	15	Middle to coarse clay, wheel markers, O: 10R 4/6 red I: 7. 5YR 5/4 brown C: 7. 5YR 4/4 brown
4	S9	--	Surface	--	Fine clay, mineral temper O/I/C: 2. 5YR 4/6 red
5	S10	--	Surface	--	Middle to coarse clay, wheel marker, O: 7. 5 YR 5/4 and 10R 4/6 Brown and red I/C: 5YR 4/4 reddish brown
6	S6	--	Surface	--	Coarse clay, smoothed, polished O/I: 5YR 5/4 reddish brown C: 5YR 6/4, 5/4 and 6/1 Light reddish brown, reddish brown and grey

IV, both about 2.70 metres wide, which opens into the inner ward of the fortress hence forming a doorway. This find might indicate that the inner curtain wall was not founded until construction period III. Yet the thickness of the inner curtain wall of about 4.5m would indeed speak against this conjecture but as we will see further below other arguments speak even in favour of a date toward the end of construction period III.

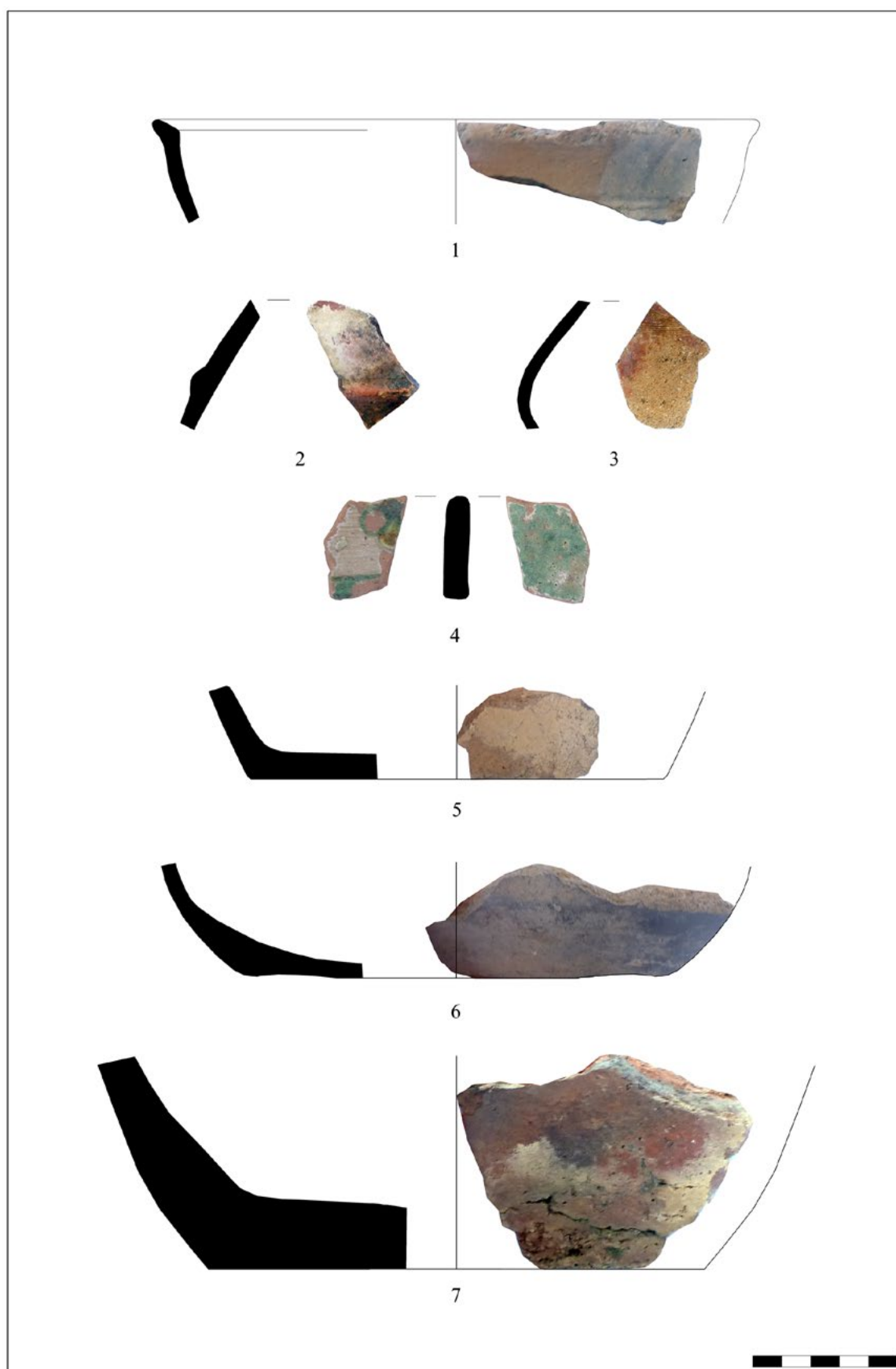
The outline of the inner curtain wall is in itself remarkable. It is in fact reinforced contrary to the outer curtain wall by rectangular towers, six along the north-eastern wall section, towers II-VI, and three, towers VII-IX, in defence of the western side respectively at the corners and at the bends of the partly polygonally erected fortification wall. Interestingly enough, the southern flank was not reinforced at all by towers despite the fact that along this side the curtain walls are most distant from each other, almost 22m, and the area in-between is completely left unoccupied by buildings.

This situation stands in clear contrast to the north-eastern side of the fortress where the inner ward is most fortified and the curtain walls converge up to 12m. Moreover, the outer ward is here almost completely occupied by buildings abutting the inner façade of the outer curtain wall. The ground plan as well as the date of these structures is not fully clear. But it appears certain that the main room was located at the corner to which sides respectively two further rooms were added. For the moment no explanation can be suggested for this discrepancy.

The interior construction of the inner ward likewise consists of a chain of rooms built along the western façade of the inner curtain wall. At the north-western corner of the inner ward the room walls are preserved up to a height of 1.50m. The thickness of the walls measures about 1m. The size of the rooms, about 5 × 6m, corresponds, finally, to that of the rooms of the outer ward. The eastern half of the inner ward was unbuilt and represents the inner court. The same scheme is encountered in the ground plan of the outer ward of the latest Medieval occupation period IIIc (see below).

The towers of the inner ward were badly preserved. But the remains seem to suggest that they might conform to a single model consisting of the succession of towers with a largely square, towers 2, 4, 9 and 11, and towers with a pronounced rectangular outline, towers 3, 5, 6 and 8. The better preserved towers 2 and 3 near the north-eastern bend measures respectively about 3.7 to 3m and 4.8 to 2.5m.

Remarkable is the finding that towers 5 and 6 of gate IV are strongly distorted to the north. This fact might again speak in favour of a date of the foundation of the inner ward during the construction period III, but in any case after the completion of the eastern section of the outer curtain wall and the construction of gate III. Later on, while gate IV of the inner ward continued to be used, gate III was again blocked and the new gate of the outer ward moved to the opposite side near the south-west corner. On that occasion the new gate V was reinforced by towers. The gate opening measures about



Sevaberd. Fig. 1-7. Scale 1:2

Plate 3

Nr.	Inv. -Nr.	Locus	Level	Diameter in cm	Description
1	S14	--	Surface	20	Coarse clay, mineral temper, glimmer, wheel marker O, I: 5YR 5/4 reddish brown C: 5YR 5/3 reddish brown
2	S15	--	Surface	--	Middle coarse clay, mineral temper, wheel marker O: 2. 5YR 4/8 red I: 5YR 3/4 dark reddish brown C: 2. 5YR 3/1, 2. 5YR 4/8 Dark reddish grey, red
3	S17	--	Surface	--	Middle coarse mineral temper, glimmer O: 5YR 4/3 reddish brown I: 5YR 3/3 dark reddish brown C: 5YR 4/3, 5YR 3/3 and 5YR 4/1 Reddish brown, dark reddish brown and dark grey
4	S18	--	Surface	--	Middle fine clay, mineral temper O, I, C: 5YR 6/4 light reddish brown O and I: green glaze
5	S16	--	Surface	13. 8	Middle coarse clay, mineral temper, wheel marker O: 7. 5YR 5/6 strong brown I: 5YR 4/6 yellowish red C: 5YR 4/1 and 5YR 4/4 Dark grey and reddish brown
6	S12	--	Surface	14	Middle fine clay, mineral temper, glimmer O: black I: 5YR 3/3 dark reddish brown C: 5YR 2. 5/1 black
7	S11	--	Surface	16. 4	Middle fine coarse, smoothed, inside wheel markers O, I: 10R 5/6 red C: 10 R 5/6, 7. 5 YR 5/1 and 10R 5/6 Red – grey – red

Colour of the ceramic fragments; the colours were determined in a wet state

O – Outside

I – Inside

C – Core

3.15m and hosts a stairway of which three steps are preserved each about 90cm deep and 40cm high. Only the northern tower 11 is on the other hand sufficiently preserved to get reliable measurements according to which the tower projects about 2m and is approximately 4m wide.

It can tentatively be assumed on the basis of the architectural comparison of the towered gates IV and V that the foundation of the inner ward might date towards the end of the construction period III, there with dividing this period into three occupation phases. The short section of the outer curtain wall related to gate V shows again a thickness of 4.5m. Consequently, it can be either deduced that gate V was built into the rubblework of the construction period II in which case the close relation between the construction periods II and III becomes once more evident; or that the thickness of the eastern section is owed to circumstances yet not identified.

The most relevant common architectural feature the construction periods II and III share is undoubtedly the *chemin de ronde* attested all around both curtain walls. The gangway is consistently 1.50m wide. The parapets are plain and preserved up to a height of 1.20m and consequently raise the outer façades of the curtain wall at these points to about 2.5m. At these, better preserved wall locations the stone infill only minimally increases the overall height of the curtain wall to a maximum of 3m.

In theory the reconstructed height of the curtain wall would provide sufficient protection for the defenders. All the more as an onslaught is practically hardly possible because of the rocky terrain, except on the west side of the fortress but which in turn is protected by a falling slope.

But on the other hand these measures would mean that the parapet must have had a thickness of 3 and along

the eastern side even of 4 metres. This of course is strategically inconceivable as the aggressors could not be combated without leaving the defence once their reached the enceinte. For this reason, an additional parapet must be assumed to have originally existed. A possible indication for its existence are the remains of stone annexes built on the gangway and in particular near the gates which are here tentatively interpreted to represent stairs leading up the factual battlement of the enceinte.

The last construction period IV is again characterised by a major rupture, architectural as well as chronological. The fortress seems to have been again dilapidated for a long period of time, possibly in consequence of wilful violence at the end of construction period III in the context of which almost the whole western section of the outer curtain wall, the weak point of the defence system, was intentionally dismantled. It may be envisaged the possibility that the assumed battlement might have been dismantled on that occasion too in order to render the fortress no longer usable. The remains today visible of the former western section of the outer curtain wall do not give the impression that this section has once been rebuilt again. One gets rather the impression that the dismantled remains were just somehow re-established to form not more than a livestock enclosure. The rubble stones are in fact randomly stacked one on another without any intention to bring about a layering. Gate V was likewise closed by a simply piled stone row fence lacking any kind of backfill. The western part of the outer ward was finally subdivided by analogous ephemeral stone walls into four compartments intentionally cleaned off the rubble debris to favour the growth of plants. It is hardly conceivable to associate these pens to a veritable construction period as they just look too recent and flimsy to persist a considerable period of time. These structures rather suggest how this monument has been used since its falling into disrepair eventually in the 10th century CE.

Thereby it has, however, to be taken into account that the inner ward might well have been used not only by shepherds as shelter but occasionally also as refuge or even as a military outpost. This conjecture is based on the evidence of several round to square recesses of 1m width and depth which were secondarily set into the rubblework along the inner edge of the inner curtain wall strongly resembling modern rifle entrenchments. It is these findings which are tentatively identified to represent the last construction period, not least because of the cartographic information at hand.

The oldest reliable cartographic evidence for the existence of a major route across the Gegham mountain range is the Russian military operation map

in the Transcaucasian region from 1809 to 1817 (*Карта военных действий в Закавказском крае с 1809 по 1817 год*)⁵¹ where the road network of the Erivan Khanate is shown. On the map a route is drawn running south of Kanaker which, therefore, presumably had followed the Dzoraghbyur River valley. Further uphill, the route crosses, however, the southern tributary, the so-called Kamaris Arm of the Getar River from where it markedly sweeps northwards and finally passes the Gegham north of the Azhdahak massif. The same course, albeit with less accuracy, is repeated in the *Carte générale du pays entre le Mers Noire and Caspienne* published by J. M. Darmet in 1819.⁵²

A more accurate reconstruction is made possible by the *Carte des possessions Russes au-delà du Caucase* released in 1840⁵³ which annotates the localities of Kanaker, Zak Gamriss (Kamaris/Gyamrez) along the road. The *Karte des Kaukasus, nach den neuesten Aufnahmen des Kaiserlich Russischen Generalstabes* released by S. Schropp in Berlin in 1842⁵⁴ gives further details of the localities and the main course. According to this map the locality of Zak/Sak laying halfway from Arinj and Aramus has to be identified with Getargel (Dzagavank Monastery). Nevertheless, this route is here clearly drawn as a secondary road, whereas the main road again follows the Dzoraghbyur River valley until Kamaris. Noteworthy is the evidence that apparently several paths crossed the Gegham mountain range parallel to the main route. Among these we find also a path following the Akunk Arm of the Getar River and thus most probably passing via Sevaberd.

Remains of the road surface of this secondary road made of pebbles are preserved south of the old cemetery of Aramus immediately east of the fortress hill. This route largely follows the Gegham mountain route as defined above on the basis of the location of the fortresses of Iron Age origin. This route indeed might have ceded its importance to the more direct conjunction from Yerevan to Kamaris via the Dzoraghbyur River valley. Nevertheless, its traditional significance as geographic reference seems to have persisted. The border between the *uezds* of Erivan' and Novo-Bayazet was drawn in fact along the Getar River arms whereby the fortress of Sevaberd acting as a major topographic reference as can be inferred from the Russian maps of the Caucasian region (*Карта Кавказского Края*) released in 1868,⁵⁵ 1869⁵⁶ and 1872⁵⁷ and in particular in comparison to the

⁵¹ http://www.etomesto.ru/map-kuban_1817/

⁵² http://www.etomesto.ru/map-kuban_1817/

⁵³ <http://gallica.bnf.fr/ark:/12148/btv1b530936367>

⁵⁴ <http://gallica.bnf.fr/ark:/12148/btv1b530289915>

⁵⁵ http://www.etomesto.ru/img_map.php?id=1183

⁵⁶ http://kubangenealogy.ucoz.ru/Kavk_kraj_1869.jpg

⁵⁷ <http://www.etomesto.ru/karta1085/>

map released in 1903⁵⁸ where the locality of Kara Kala (Sevaberd) is specifically annotated.

In this latter regard, the detailed map of the *uezd* of Novo-Bayezet (*Карта-Новобаязетского-уезда*) published in 1899 gives the most accurate view of the dense path network in use at that time.⁵⁹ Noteworthy is the information that all path running both across the Kotayk Plateau as well as along the Dzoraghbyur River valley converged near the locality of Kara Kala (Sevaberd) from where only one path finally led uphill to Lake Akna and across the Gegham mountain range.

In conclusion

The new evidence disproves the view for a Bronze Age origin of the fortress of Sevaberd. Shards of this epoch which have been reported from this spot have, therefore, to be regarded as fortuitous. This is not to say, however, that a settlement might not have existed here or nearby. But no relation exists to the much younger fortress of the 8th century BC.

The new date for the foundation of the fortress of Sevaberd into the Middle Iron Age gives a significant argument for the reconstruction of the Urartian expansion into the coastal regions of Lake Sevan across instead of around the Gegham mountain range from the north as was assumed on the basis of the location of the Urartian cuneiform rock inscriptions. Moreover, it was argued that the establishment of the fortification system on the Kotayk Plateau by Argishti I signified a cornerstone for the control of the Ararat plain and the development of the Gegham mountain route which, once substantially fostered by his successors, at first, through the foundation of the fortress of Sevaberd at the latest by his son Sarduri II, and in particular through his conquest of the royal city of Šinalibi (near Vardadzor), and thereupon through the foundation of the fortresses of ^dHaldiei URU (Nor-Bayazet/Gawar) and Tsovinar by Rusa I, developed to a significant overland route connecting the centres in the Ararat plain and the south-western coastal region of Lake Sevan. Here it joined the eastern route to the lands 'across the lake'⁶⁰ as well as the southern route as recently corroborated by the discovery of the Urartian fortress at Getap.⁶¹

The remembrance of the strategic importance of the Gegham mountain route stayed alive and, if ever necessary, was quickly revitalised as soon as through the foundation of Artaxata in the 2nd century BC a political barycentre again raised in the eastern half of

the Ararat Plain. It has been, in fact, suggested that the fall of the kingdom of Urartu did not signify a general breakdown in the use of fortresses as has been often assumed because of a one-sided view of the historical background behind the violent destructions of many Urartian centres. In our opinion this approach lacks, however, a comparable archaeological proof not least because of our unawareness of the material culture of the following decades.⁶²

The archaeological evidence from the fortress of Aramus rather shows that this fortress continued to be used until the 2nd/1st century BC without interruptions, although gradually shrinking in extent and finally reduced to the Central Fort.⁶³ The stratified ceramic evidence at Aramus for the youngest branch of the Lchashen-Metsamor pottery LM-6, as recently defined by Avetisyan,⁶⁴ calls for a critical and above all fortress-related reassessment of the nature and date of its respective destruction. Stratified key finds from Aramus suggest that Karmir Blur, but also Oshakan and Horom which, like Aramus, are located in the uplands of the Lesser Caucasus continued to be used along with Erebuni, Armavir and Garni well into the 6th or even 5th century BC.⁶⁵

Whether the fortress of Sevaberd can be included in this chronological issue cannot be reasonably answered without excavations. But it has to be remarked in this context that the continuity ascertained for several Iron Age fortresses along the south-western coast of Lake Sevan strongly suggests that the Gegham mountain route, and thus also Sevaberd, remained in use throughout the Orontid/Yervandid period.

Whenever necessary, later entities could draw on this fortification infrastructure which came into being in the Iron Age to secure and control the crossing of the Gegham mountain range. The prominent importance of Artaxata/Artašat, Vałaršapat (Ėjmiacin) and Dvin kept the tradition of the Gegham mountain route alive and which, in the past and present, has from time to time influenced the demarcation of borders.

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⁵⁸ http://www.etomesto.ru/img_map.php?id=1183

⁵⁹ http://kubangenealogy.ucoz.ru/Kavk_kraj_1869.jpg

⁶⁰ <http://www.etomesto.ru/karta1085/>

⁶¹ http://www.etomesto.ru/map-kuban_dorozhnaya/?x=44.693138&y=40.332359, <http://map.etomesto.ru/base/23/1903kavkaz.pdf>

⁶² Muscarella 1973: 69–75.

⁶³ <https://ru.wikipedia.org/wiki/Файл:Карта-Новобаязетского-уезда.jpg>

⁶⁴ СТU A 10-2. Salvini 2002: 56–57.

⁶⁵ Melkonyan et al. 2010.

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Royal Capital: Gagik I Bagratuni and the Church of Gagkašēn

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Abstract: The *Universal History* of Step'anos Tarōnec'i, of the early 11th century, contains a precious report on the construction of the church of Gagik (Gagkašēn) in the medieval city of Ani. It relates the Bagratid king Gagik I (r. 989-1017/1020) ordered the construction of a copy of the seventh-century church of Zuart'noc'. The passage is striking because 1) it documents the conspicuous appropriation of seventh-century forms in Armenian architecture of the tenth and eleventh centuries; 2) both the churches of Gagik and Zuart'noc' survive at least in ruins, allowing us to observe the physical resemblances between them; and 3) the text of Step'anos makes clear that Gagik issued his order *after the church of Zuart'noc' had collapsed*. If we take this text at face value, we must ask, how do you copy a church in ruins, and why do it in the first place? This essay presents a series of possible reasons. In so doing, it explores the importance of building design and technology to Armenian royal ideology and to relations between Byzantine and Armenian rulers at the turn of the 10th century.

Keywords: Ani, Gagik, Bagratid, Zuart'noc', Gagkašēn, Bana, Trdat, Step'anos Taronec'i, Basil II

The *Universal History* of Step'anos Tarōnec'i, of the early 11th century, relates that:

*'In the thousandth year after Our Lord was incarnate and made man, in the days of the emperor Basil, Gagik, king of the Armenians, was seized with the good idea to build the magnificent church in the name of Saint Gregory, in K'alak'iwtašt, which had fallen and was in ruins, with the same measurements and the same composition, in the city of Ani, on the side of the valley of Całkoc'ajor. [His church was] marvellous to behold, with massive, boulder-size, polished masonry, intricate sculpture, light-bringing windows, a triple-door portal, and a dome like the high vault of heaven.'*¹

This text thus describes how the Bagratid king Gagik I (r. 989-1017/1020) ordered the construction at Ani of a copy of a church of Saint Gregory that was located at *K'alak'owdašt* (city plain). The passage is striking for many reasons. First, it documents a widespread phenomenon of the tenth- and eleventh-century Armenian architecture: the conspicuous appropriation

of seventh-century forms. Second, both of the churches to which the text refers (the church of Gagik at Ani, and the church of Zuart'noc' in the Armenian Republic) survive at least in ruins, allowing us to observe the physical resemblances between them. Third, and most interesting of all, the text of Step'anos makes clear that Gagik issued his order *after the church of Zuart'noc' had collapsed*, which the author emphasizes with the double construction 'fallen down and in ruins' (փլեալ եւ կործանեալ). If we take this text at face value, we must ask, how do you copy a church in ruins, and why do it in the first place? I present here a series of possible reasons. In so doing, I will explore the importance of building design and technology to Armenian royal ideology and to relations between Byzantine and Armenian rulers at the turn of the 10th century.

Gagik's church of Saint Gregory, or 'Gagkašēn,' lies in the northwest sector of the city of Ani, about two hundred meters south of the city walls founded by his brother Smbat (Figure 1). Gagkašēn collapsed sometime before the 13th century, when houses were built on and with the ruins of the church. In 1905-6, Nikolai Marr and T'oros T'oramanyan excavated the site, but no sustained investigations have been undertaken since. Plans produced by T'oramanyan reveal a large rotunda of about 33m with a small apsed chamber projecting from the east, entered by three doors, and pierced by 32 windows (Figure 2). This wall encloses an inner quatrefoil shell of four columnar *exedrae* that, together with four massive piers and single diagonal columns, supported a domed superstructure. The tuff-stone revetment was cut in very large rectangles, attesting to the 'boulder-like' masonry in Step'anos' description, and was decorated with geometric and vegetal

*I am delighted to present this small offering to Gregory Areshian in celebration of his 65th birthday. I am grateful to him for his commitment to the material culture of Armenia, and for sharing his knowledge with generations of students. The subject of this essay reflects his abiding interest in the royal Bagratid capital of Ani.

¹ Յայնմ ժամանակի, յորում լնոյր լոյսեամբ ամն մարմնանալոյ կամ մարդանալոյ Տեառն մերոյ, ի Վասի կայսեր յաւուրս, Գագիկ արքայ Հայոց խորհուրդ բարի ի յանձին կալեալ՝ գմեճաշէն եկեղեցին, որ ի Քաղաքուղաշտի, անուամբ սրբոյն Գրիգորի շինեալ, որ էր փլեալ եւ կործանեալ, կամեցաւ նոյնաձէն չափով եւ յօրինուածով յարդարել ի քաղաքին Անույ, հիմնարկեալ ի կուսէ Օաղկոցաձոր ձորոյն, մեծատաշ, վիմարդեան, կոփածոյ վիմօք, մանուածոյ քանդակաւ յօրինեալ, լոյսանցոյց պատուհանօք, երրակի դրանց դրանդէօք, սքանչատես տեսլեամբ գմբէթեաւորեալ, գունակ գերամբարձ եւ երկնանման գնդին (Step'anos Tarōnec'i. Book 3, chap. 74, ed. Malxaseanc' 1885: 282).



Figure 1. Church of Gagik (Gagkašēn), view (photo: author).

reliefs, applied colonnettes, and a sundial.² The most astonishing sculptural element unearthed, however, was the over life-size, nearly in-the-round, polychrome statue of Gagik holding a model of his church (Figure 3).³

Gagkašēn follows Zuart'noc' (Figure 4) remarkably closely. Both buildings feature a double-aisled tetraconch plan. Both also share almost precisely the same measurements in overall dimensions and the relationship of components. For example, in both cases the exedra, measured from the center points of the piers, are exactly 15m in width. The diameters of the entire inner core are also equal, measuring 25m from the centers of the north and south exedrae. The

Ionic capitals of Gagkašēn (Figure 5) also evoke those of Zuart'noc' (Figure 6), although in more schematized form, as does the zig-zag decoration, profiling of the arches, and even the presence of a sundial.

They are not, however, identical: changes have been made to the plan, including the narrowing and diminishing of the eastern chamber and the insertion of a fourth columnar exedrae. A comparison of the dome piers shows that the revetment stones used at Gagkašēn were cut to be over twice the size of those of Zuart'noc'. The colonnettes of the four piers project more emphatically than at Zuart'noc'. Finally, the ambulatory of Gagkašēn, measured from the outermost points of the exedrae, is half of the width of that of Zuart'noc', effectively increasing the relative size of the domed area.

Now that we have examined what was done, we should return to how and why. We can approach the former question because Step'anos identifies the architect who built Gagkašēn, names other buildings by him, and also offers some insight into his working methods. Chapter 11 of Book 2 tells us that Trdat, in the time of Smbat II's

² Excavations of the site also revealed a bronze chandelier with fittings for over 117 lamps attached to a chain 19m long. This object, now in the historical museum in Yerevan, is particularly interesting in light of Step'anos's testimony that Gagik regularly sang in the night office (Malxaseanc' 1885: 256) The length of the preserved chain maybe also useful in envisioning the total height of the building.

³ This statue (2.25m high) is also the only medieval Armenian sculpture in the round and featured the king in a turban and a long-sleeve cloak, turning slightly away from the façade to which he was attached. The model in his hands only survived up to the first tier, but the artist Poltoriatzky reconstructed the model with three tiers.

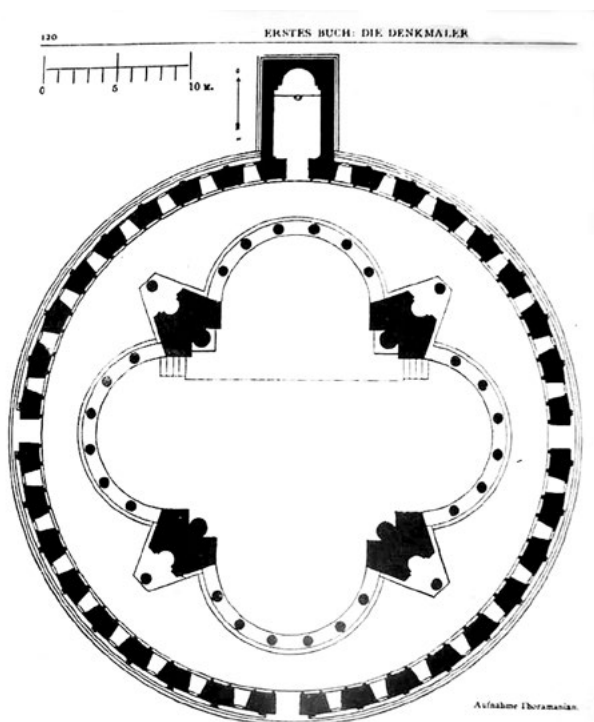


Figure 2. Church of Gagik (Gagkašēn), plan (after T'oramanyan 1984, Figure 23).

fortification of Ani (977-989), constructed the church of Argina and laid the foundations of the cathedral of Ani.⁴ Chapter 28 recounts the great earthquake that hit Constantinople in 989, which caused the collapse of the dome of the Hagia Sophia.⁵ It also reports that 'Trdat of the Armenians' was in the city, presented a plan (օրինակ) and a model (կաղապար) of the work to be done, and undertook the initial repair.⁶ Unfortunately

⁴ Ջայսու ժամանակաւ մեռաւ թագաւորն Հայոց օրինեալն Աշոտ ի ՆԻԶ թուականին, եւ ի նոյն աւուր թագաւորեաց Սմբատ որդի նորա ամս ժԳ: Սա լիք արկեալ՝ պարսպափակ առնէ զպարիսպն Անույ, յԱխուրեան գետոյ մինչեւ ցճորն Ծաղկոցաց, կրով եւ վիմով մածուցեալ, մահարձանօք եւ աշտարակօք բրգանց, բարձրաբերձ պարսպեալ բացագոյն քան զհին պարիսպն յընդարձակութիւն քաղաքին, եւ մայրաքերան դրամբք, երկաթազամ հաստահեղոյս բեւեռալինդ ամրացուցեալ: Արկանէ հիմն եւ մեծաշէն եկեղեցոյն ի նոյն քաղաքին Անույ ի ձեռն ճարդարապետին Տրդատայ, որ զկաթողիկոսարանին եկեղեցին շինեաց յԱրգինայ (Malxaseanc' 1885: 187).

⁵ Byzantine sources that mention the earthquake include Leodiasconus, Scylitzes, and Glykas. The episode is also mentioned by an Arab text (Yahya-ibn-Sa'id). For a complete list of texts, analyses, and further references, see Mango 1992: 54; 1962: 77.

⁶ Եւ զկնի սակաւ աւուրց շարժեցաւ աշխարհն Յունաց ահաւոր դողմամբ, մինչեւ կործանել բազում քաղաքաց եւ գիւղից եւ գաւառաց, եւս առաւել ի Թրակացոց եւ Բիւզանդացոց աշխարհին հանդերձ ծովովն, որ ի մէջ մոցա ծածանեալ ծփէր սասանմամբ, մինչեւ ի մոյն ինքն ի թագաւորական քաղաքին Կոստանդնուպոլսի մեծաշուք եւ բազմապայծառ զարդ հրաշատեսիլ սեանց եւ պատկերաց եւ եկեղեցեաց մեծամեծաց կործանեալ փլուզանիւր, եւ նոյն ինքն Սոփիայն, որ կաթողիկէն է՝ հերձանիւր պատառմամբ վերուստ ի վայր: Վասն որոյ բազում ջան եղեւ արհեստաւոր ճարտարացն Յունաց առ ի վերստին նորագել. Այլ անդ դիպեալ ճարդարապետին Հայոց



Figure 3. Model of the Church of Gagik at Ani, drawing by S. N. Poltoratsky (after Marut'yan 1963: Plate 21).

no such plan or model survives, but archaeological inspection of the western portion of the dome of the Hagia Sophia has persuasively identified the tenth-century intervention, and suggests that Trdat made a careful study of the deformation on the south side of the dome, still surviving in its sixth-century state, which exhibits a threatening outward bulge.⁷

I have discussed this text and its potential relations to Trdat's working practices elsewhere.⁸ Here I just want to make two points. First, the report of Trdat's

Տրդատայ քարագործի՝ տայ զօրինակ շինուածոյն, իմաստուն հանճարով պատրաստեալ զկաղապարս կազմածոյն եւ սկզբնաւորեալ զշինելն, որ եւ գեղեցկապէս շինեցաւ պայծառ քան զառաջինն (Malxaseanc' 1885: 250-251).

⁷ Emerson and Van Nice 1951: 163-171. See also Emerson and Van Nice 1943: 403-465.

⁸ Maranci 2003: 294-305.

Abb. 112. Zwarthnotz, Palastkirche:

Grundriß (stärker verkleinert!).

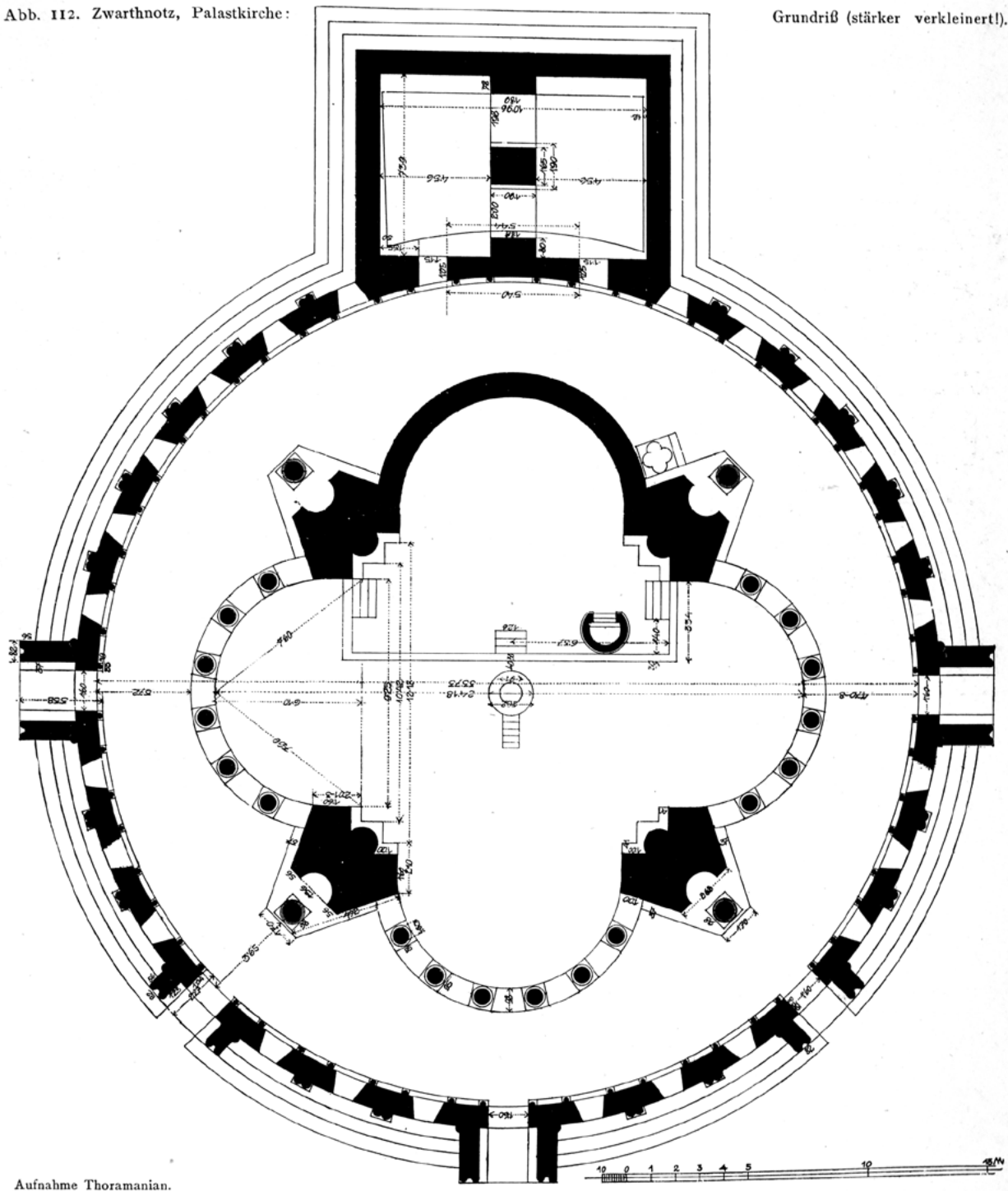


Figure 4. Church of Zuart'noc', plan (after T'oramanyan 1918: 115, Figure 112).

production of architectural representations fits well with the close similarities of Zuart'noc' and Gagkašen, suggesting that a plan was used for the transfer of ideas. Second, the careful observation of a building and its structural failure (as Trdat would have undertaken at the Hagia Sophia) would obviously be of primary importance in reconstructing a building type that had already collapsed. It may be that certain features

introduced at Gagkašēn, such as the larger revetment slabs, and the more strongly projecting colonnettes of the piers, were designed in response to a study of the ruins of Zuart'noc'. But not all the changes made were to strengthen the structure: for example, might the narrowing the ambulatory of Gagkašēn have compromised the counterthrust to the central dome? It may be that this feature, like the fourth columnar



Figure 5. Church of Gagik (Gagkašēn), Ionic capital (photo: author).



Figure 6. Church of Zuart'noc', Ionic capital (photo: author).

exedra, was inspired by Trdat's experience of the astonishingly spacious *naos* of the Hagia Sophia.⁹ In any event, what we have in Trdat is a rare or even unique convergence of primary source information about a medieval architect, his buildings, his working methods, and about the conceptualization and process of architectural imitation.

Let us now turn to Gagik. Why would he choose to copy a church that already lay in ruins? Maybe it was because Zuart'noc' was dedicated to Saint Gregory. Gregory was the Illuminator of Armenia, the patron saint of the nation, and the founder of the Armenian Orthodox Church. By the 9th century at least, Zuart'noc' was thought to be dedicated to him. Moreover, sources relate that Zuart'noc' was located on the road in which Gregory and the pagan king Trdat met each

other before they began a mass baptism and church-building campaign. It may be, then, as Lynn Jones has suggested, that the 'associations [of Zuart'noc'] with the illuminator and with the conversion of Armenia makes it an obvious choice for royal patronage.'¹⁰ Yet, there were other churches dedicated to Gregory, on similarly (if not more) hallowed ground, and still standing upright.¹¹

I would like to suggest some other reasons for Gagik's choice. First, Zuart'noc' was, even in ruins, a spectacular building. Mounted on a seven-stepped podium, the church presented a design of enclosing rotunda and inner tetraconch for which no known precedent exists. Much ink has been spilled on both the origins of the plan and the design of its superstructure; my view is that Zuart'noc' represents a creative fusion of traditions from Syria, Constantinople, and the Holy Land.¹² Along with many other scholars, I envision a three-stepped building most likely of diminishing cylindrical tiers: a design that, although inventive and striking, was not stable enough to withstand the centuries. Zuart'noc' seems to have been the inspiration for at least two other early medieval monuments, apart from Gagkašēn: the foundation of church of Bana, in Tayk'/Tao and the church near Lekit in Caucasian Albania, both now in ruins.

Medieval accounts of Zuart'noc' praise the structure in the usual ways: for the seventh-century text of Sebeōs it is 'tall' and 'incomparably wonderful;' for the tenth-century Yovhannēs Drasxanakertc'i, it is the 'great and wonderful House of God;' for Step'anos, writing after the earthquake in which it collapsed, Zuart'noc' remained 'magnificently-built'. More evocative and potentially significant is Mxit'ar Ayrivanec'i's description of Zuart'noc' as 'the wonder of the universe' (զգարմացուցիչն տիեզերաց).¹³ But the most interesting written account of Zuart'noc' appears in the tenth-century *History of the Caucasian Albanians* attributed to Movsēs Kalankatowac'i. In this text, the Byzantine emperor Constans II (630-668) goes to the dedication ceremony of Zuart'noc' and he is so astonished (յաւէթ հիացեալ) by the structure that he orders another for his own palace in Constantinople (unfortunately, the builders die on the way there).¹⁴

¹⁰ Jones 2007: 99.

¹¹ E.g. on Mount Sepouh, at Xor Virap, in T'ordan, by the 10th century at Noratus, and Barjraša in Dsef.

¹² Maranci 2015: 113-199.

¹³ Ališan 1890: 245; Maranci 2015: 113-199.

¹⁴ '[Nersēs] was the adopted [spiritual] father (հայրգիր) of this Constantine, and at his expense (զանձիւքնորա) he constructed a fold for the splendid flock in K'alak'udašt, that is, the church of Saint Gregory, and called the king of the Romans to the dedication. [The king] was so astonished at the construction that he ordered the builders to follow him, so that they might construct a similar one in his palace. [The builder] however, never arrived, for he died on the way (Movsēs Dasxuranc', trans. Dowsett 1962: 130). Սա էր հայրագիր նորին Կոստանդնի եւ զանձիւք նորա շինեաց զբազմապայծառ փարախն բանաւոր հօտից ի քաղաքուղաշտի ի սուրբն Գրիգոր եւ ի նաւակատիս կոչեաց

⁹ See Maranci 2003: 294-305.

Whether or not this passage is historically accurate (and ink has been spilled on this account, too) it is noteworthy that Zuart'noc' is presented therein as an amazing church, so much so that even the Byzantine emperor himself, whose 'local churches' included the Hagia Sophia, wanted his own personal copy. Zuart'noc' is, in this text, not just a church dedicated to Saint Gregory, but a showcase of specialized, and localized, technology and artisanship.

These characteristics, I suggest, also attracted Gagik to Zuart'noc' as a kind of signature architectural statement. It is noteworthy that he does not attach his name to the Cathedral of Ani, founded by his deceased brother; rather, as we know from Step'anos and from building inscriptions, it was Gagik's wife Katramide who completed the Cathedral.¹⁵ Instead, Gagik undertook a project that was his in its entirety. To this monument, he attached an over life-size donor portrait – the largest known from the South Caucasus, and the only one executed in-the-round. While I have yet to confirm whether it is a medieval, as well as modern usage, it is notable that 'Gagkašēn' is not derived from the dedication of the church but, unusually, from the patron's name 'Gagik'.

There is a further dimension to Gagik's interest in rebuilding Zuart'noc'. In 999, within a year of the foundation of Gagkašēn, the Byzantine emperor Basil II (958-1025) annexed Tayk', just north of the Bagratid kingdom, as part of his ongoing eastward expansion. Step'anos tells us that upon visiting Armenian territory in 1000, 'the other rulers were hastening to submit [to him]'.¹⁶ Basil awaited Gagik's arrival, but the king, we are told, remained at Ani, and refused to pay homage.¹⁷ In his absence, Gagik's nephew, Apusahl, took the opportunity to slander Gagik to Basil, which so enraged Gagik that he ravaged the domains of his kinsman.

These episodes suggest an abiding concern with royal self-image on the part of Gagik. Step'anos tells us elsewhere that Gagik was a great king (pious, strong, generous) but laments that he had one defect or wickedness (չար) that neither the author nor any

subsequent source identifies.¹⁸ We might guess, based on both Gagik's treatment of the emperor, and his own larger-than-life size self-representation, what that wickedness might be.¹⁹ In any event, the texts suggest that Gagik perceived Basil as a rival and a threat, and his annexation of Tayk' as an encroachment on Bagratid authority – an entirely reasonable perception in light of the Byzantine conquest of Armenian territories, by the end of Basil's career in 1025, and by 1045, the entire Bagratid kingdom including Ani. It is noteworthy, in this respect, that Basil II's annexation of Tayk' meant his inheritance of Bana, the largest of the Zuart'noc'-type churches. It is also interesting that Gagik chose as architect of his new church Trdat, who had previously worked for Basil II at Hagia Sophia. I suggest therefore that Gagik rebuilt Zuart'noc' to display his own control over such talent, and the intellectual and technological capital of his kingdom.

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գթազատորն Հռոմոց, որ յաւեծ հիացեալ ընդ շինուածն՝ ետ հրաման շինողացն գնալ զկնի ուր, զի գնոյնաճեն յարմարեացէ 'ի պալատանն. Եւ ոչ ժամանեալ կնալ 'ի տուն իւր՝ 'ի ճանապարհին վախճանէր (ed. N. O. Emin, 1860: 363-364). This passage also suggests, as T'oramanyan first noted, that depending on how զանձիքնորաւ is interpreted, Constans II financed Zuart'noc'.

¹⁵ Malxaseanc' 1885: 256.

¹⁶ Malxaseanc' 1885: 277.

¹⁷ Եւ ինքն չունեալ անցանէ 'ի գաւառն Հաքք 'ի Մանազկերտ քաղաք, եւ անդուստ 'ի Բագրեւանդ; բանակի 'ի դաշտին մերձ 'ի քաղաքն Վաղարշակերտ; մնայր գալստեան Գագկայ արքային Հայոց. Այլ նա իբրեւ փոքրութիւն համարեալ զգնալն իւր առ նա՝: իսկ քունդորդին Գագկայ Ապուսահլ չարախօս եղեւ զնմանէ առ Վասիլ: Վասն որոյ Գագիկ հրաման տուեալ որդւոյ իւրոյ Յովհաննիսի՝: Եւ յաւառի ետ գգաւառն Աբուսահլի զԿոզոյովիտն եւ զՕաղկոյտոն (Malxaseanc' 1885: 277-8).

¹⁸ Malxaseanc' 1885: 256.

¹⁹ Pride! Macler (165) believes that Gagik's refusal to pay homage was the single fault that Step'anos mentions, although does not identify. It seems equally possible to construe չար more generally as a character defect rather than simply a political misstep, as I have done above. But I leave this question to those more qualified to answer it.

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Notes on Anatolian Loanwords in Armenian

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Abstract: Two circumstances unite the Armenian and Anatolian languages: (1) a common Indo-European origin, and (2) geographical proximity of their historical homelands, namely the central and western parts of the modern-day Turkey for Anatolian, and the Armenian Highlands (the Armenian plateau) for Armenian. In this paper we will be concerned with loanwords from Anatolian to Armenian, which would have been transferred mainly in the 2nd millennium BCE and possibly also in the early 1st millennium BCE.

It has been claimed that only isolated and only Luwian loanwords can be found in Armenian. However, a number of etymologies that suggest borrowing from Hittite are rejected too easily. Rather than give final decisions on the quantitative and qualitative characteristics of the Anatolian borrowings in Armenian, this paper merely aims to rework and supplement some of the relevant etymological material.

The following etymologies are of particular importance:

šelj (spelled also as *šlj*), *i*-stem, *o*-stem 'heap, mass, pile, accumulation (mainly of corn, fruits and the like)' < Hittite *šēli*- c. (gen. *šēlijāš*) 'grain pile, grain storage'. The Armenian *-j* reflects the regular development **R_i > R_j*, compare IE **h₃nōrjo-* > Arm. *anurj* 'prophetic dream, vision', **uel-i-ōh > gel-j* (gen. of *giw* 'village'), etc. The initial *š-* instead of the expected *s-* is not a valid argument against this etymology because an Armenian hissing consonant easily becomes hushing in the presence of a hushing consonant in the word, e.g. **canač'em > čanač'em* (cf. aor. *caneay*, imper. *canir*) 'to know, recognize' and **z-oyž > žoyž* 'endurance, hardihood'.

Mušel m. < Hitt. *Muršiliš*; examples for the development **rs > (r)š* include: *mašem* vs. *maršem* 'to use up, consume, wear out'; *moš(-i)* 'tamarisk; blackberry, bramble' < **mor-s-ya-* vs. *mor* 'blackberry' (cf. Gr. *μύρον* 'black mulberry, blackberry'); *k'ašem* vs. *k'aršem* 'to draw, drag, pull' (cf. MPers. *kešidan* and ManMPers. *krš-* 'to pull, draw'); *p'oši* 'dust' prob. an *i*-derivative of substr. **p^horso-* (cf. OCS *praxъ* 'dust'); *kaši* 'skin, hide, leather' (see below).

In the last section I propose some of my own etymologies, of which the following three deserve particular attention:

kaši 'skin, hide, leather' from an Anatolian culture word **g^hrso/i-*, cf. Hitt. *kurša-*, *kurši-* c. 'skin, hide, fleece; skin bag, sheepskin as a divinized fetish or talisman' (for Arm. *i*-suffix, compare a synonymous word, *mort'-i* vs. *mort'*, *o*-stem 'skin, hide, leather'; for the development **rs > (r)š*, see above on *Mušel*).

targal 'spoon' < Hitt. *ḡṣtaru-āli-* n., which refers to an implement used for grinding or crushing, probably something like 'pestle', cf. CLuw. *taruḡal-* 'mortar'. For **-al(i)* in designations for implements or the like cf., e.g., Hitt. *ḡṣhulāli-* n. 'distaff'.

tup', *o*-stem 'case, box, chest, censer' < Hitt. *ḡṣtuppi-* 'ark, container', also attested in the form *ḡṣtuppa-*; seems to be identical with *ḡd/tuppa-* 'storehouse'.

I conclude that (1) we are not yet ready for the final evaluation of the relevant material and clear-cut conclusions, and (2) the existence of Hittite loanwords in Armenian should not be excluded.

Keywords: Anatolian loanwords in Armenian, Armenian comparative linguistics, Armenian etymology, Armenian phonology, Presence of Armenian in the Armenian Highlands

Armenian and Anatolian: general remarks

Two circumstances unite the Armenian and Anatolian languages: (1) a common Indo-European origin, and (2) geographical proximity of their historical homelands, namely the central and western parts of the modern-day Turkey for Anatolian, and the Armenian Highlands (the Armenian plateau) for Armenian. The former circumstance raises the question of linguistic relationship between these two branches within the

Indo-European language family, whereas the latter is concerned with the issue of loanwords which would have been transferred mainly in the 2nd millennium BC and possibly also in the early 1st millennium BC.

Common heritage

On the basis of the (alleged) identification of *hay* 'Armenian' / *Hay-k'* (-*o-c'*) 'Armenia' with *Hatti*¹ and a number of linguistic features² it has been assumed that Armenian and the Anatolian languages were intimately

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¹ Jensen 1898; 1904; 1911. Cf. Kretschmer 1933; Martirosyan 1972: 164–166 < 1921–22. For more references, see Martirosyan 2010: 383.

² Austin 1942.

related. Scholars have addressed several phonological and morphological correspondences between Armenian and the Anatolian languages, such as the preservation of the Indo-European laryngeals (cf. Arm. *han* ‘grandmother’ and Hitt. *ḥanna*-‘grandmother’ vs. Gr. *ἀννίς* ‘mother-in-law’, etc.; Arm. *haw* ‘grandfather’ and Hitt. *ḥuḥḥaš* ‘grandfather’ vs. Lat. *avus* ‘id.’, Lith. *avýnas* ‘maternal uncle,’ etc.; Arm. *hovi*- ‘sheep’ in *hoviw* ‘shepherd’ and CLuw. *hāu(i)*- ‘sheep’ vs. Lat. *ovis* ‘sheep,’ etc.), the Armenian subjunctive in *-ic’ē* and the Hittite iterative in *-eške-*, as well as a considerable number of lexical correspondences. However, some of these correspondences (such as Arm. *getin* ‘earth, ground’ and Hitt. *utnē* ‘land,’ Arm. *barju* gen. ‘high’ and Hitt. *parku-* ‘high’) are likely to be archaisms rather than shared innovations, others proved wrong, and a few of the lexical comparisons may be explained as loanwords. We can therefore assume that there is no particular relationship between Armenian and Anatolian within the Indo-European family.³

Loanwords: historico-geographical background

The problem of the linguistic relationship between Armenian and the Anatolian languages (in particular, Anatolian borrowings in Armenian) has attracted the attention of various scholars since the early 20th century.⁴ There is a certain scepticism concerning the existence of Hittite loanwords in Armenian, whereas the Luwian ones are largely accepted. The scepticism is mainly conditioned by chronological and geographical problems.⁵ As Greppin (1980b: 357) points out, if we can show clear-cut evidence for Hittite in Armenian, we will know that the proto-Armenians were in their historical homeland in the 2nd millennium BC. The opinion that speakers of Armenian migrated into the Armenian Highlands after the fall of the Urartian Empire in the 6th century BC should be abandoned. That the Armenian language was present in the historical Armenia in (or

prior to) the Urartian period is confirmed particularly by Armenian loanwords in Urartian.⁶ Diakonoff (1984: 112) claims that ‘we should apparently seek the Proto-Armenians either in the Muški or in the Urumeans who penetrated into the valleys of the Upper Euphrates and the Arsaniyas around 1165 BC.’⁷

In order to be more confident of the existence of specifically Hittite loanwords in Armenian, we need to have linguistic evidence that would confirm the earliest presence of speakers of Armenian in historical Armenia prior to the 12th century BC, for which Jahukyan (1988; 1990) presents a large number of arguments. Not all of them are convincing, however.⁸ Earlier (Jahukyan 1970: 146-147) he had assumed that, should the theory on the coming of the speakers of Armenian in the 12th century BC prove correct, we will be dealing with contacts between them and the residual populations of the destroyed Hittite Kingdom. On the other hand, it has been suggested that the handful of Anatolian loanwords in Armenian ‘were probably picked up during the migration eastward through Anatolia’ (Fortson 2010: 382).

The chronological and geographical framework of early contacts between Armenian and the Anatolian languages may be placed within the context of the kingdom or tribal confederation of *Ḫaḫša-*, which is attested only in Hittite texts from the 14th to 13th centuries BC. This place is located in the northwest peripheries⁹ and perhaps in central regions¹⁰ of historical Armenia. The name of *Ḫaḫša-* is reminiscent of the ethnonym *hay*, gen. *hayoc* ‘Armenian’ (cf. *Hay-k* ‘Armenia’), although the origin of the latter has not been established with certainty. Recently (Kitazumi 2013; Simon 2013: 127) the connection has been criticized particularly on the basis of the Armenian *h-* instead of

³ For a discussion, see Ačařyan 1925: 393; Bonfante 1939; 1946; Fortson 2010: 382; Greppin 1981a; 1988: 189-190; Jahukyan 1967; 1970: 123-168; 1994; Kammenhuber 1961; Kerns and Schwartz 1942; Morani 1981; Pedersen 1924: 225b = 1982: 308b; Porzig 1954: 187-192 (with lit. on 187) *et passim*; Solta 1960: 471; 1990: 16; van Windekens 1980.

⁴ Adonc’ 1911; 1927; 2006: 79-85, 86-96; Ačařyan 1925; 1940: 134-139, 144-149; Bleichsteiner 1927; D’jakonov 1983: 165; Fritz 2014; Gamkrelidze and Ivanov 1984, 2: 912-913 = 1995: 807; Greppin 1972; 1975; 1978a; 1978b; 1978-79ab; 1980a; 1981; 1982; 1988: 189; 1991: 204-206; Hmayakyan 2007; 2009; 2010; 2013a; 2013b; Jahukyan 1967; 1970: 123-168; 1987: 311-321; 1988; 1990: 25-28; Lap’anc’yan (Kapancjan) 1931; 1947 *passim*; 1956 *passim*; 1961: 147ff.; 1975: 174-179, 412-429; Kosyan 1994; 1998; Martirosyan, N. 1924; 1926; 1929; 1972; Martirosyan, H. 2010 *passim*; Mkrtč’yan 1969; 1970; 1974; Petrosyan, A. 2009; 2010a; 2011; 2012; Petrosyan, S. 1987; Russell 1987: 361-373; 2004: 372; Roth 1927; Schultheiß 1961; Simon 2013; Tirac’yan 2006; 2008; Vardumjan 1991: 65-76; Xač’atryan 1967; 1971; 2012. Some syntactic issues are discussed in Luraghi 2008 and Sideltsev 2015. For the historical background at the relevant period, see D’jakonov 1961; 1968: 74-122; 1983; Diakonoff 1984. On Hittitology in Armenia, see Łazaryan 2014.

⁵ Cf., e.g., Greppin 1978b; 1988: 189; Simon 2013: 128-129; note also D’jakonov 1983: 165.

⁶ E.g., Urart. *aršibi*-from Arm. *arcui* ‘eagle’ and Urart. *Tuarašini ḫubi* vs. Arm. *Tuaracatap*’ (district in the province of Turuberan) composed of *tuarac* ‘herdsman’ and *tap*’ ‘plain, flat field’. Armenisms in the Urartian language are not limited purely to lexical correspondences. Urartian *me(i)* probably reflects the Armenian prohibitive particle *mi* (Arutjunjan 2001: 454b; Jahukyan 1963: 124; Martirosyan 2013: 91; Yakubovich 2010), which derives from the PIE prohibitive particle **meh₁*.

⁷ Gercenberg (2010: 200) and Vaux (2006: 475a) accept the view on the Armenian settlement in the (second half of the) 2nd millennium, and Watkins (2011: xii) notes that Armenians had ‘probably already settled in eastern Turkey by the mid-second millennium BC’.

⁸ For more material and a discussion of this and related issues, see a number of works by Petrosyan, such as 2006; 2007; 2010b and 2014, as well as Martirosyan 2010 and 2013 *passim*, on some relevant words. Note also my recent talk, *The current state of studies and new perspectives in comparative-historical Armenian linguistics*, presented at the International conference ‘Current Practices in Armenian Studies: The Creation and Visibility of New Knowledge’ (May 31 and June 1, 2014, UCLA, Los Angeles).

⁹ For a discussion and literature on *Ḫaḫša-* in general and its localization in particular, see Martirosyan 2010: 382-385; Petrosyan 2006; 2007.

¹⁰ For literature and some recent considerations on the problem of localization of *Ḫaḫša-*, see Kosyan 2008: 264-266; 2011; 2014a (especially p. 133 n. 6 with lit.), 2014b; Łazaryan 2009: 52-54.

the expected *x*-. One might think, however, that *Haiaša*- may merely be a cuneiform reflection of the local name with /h/, for which the cuneiform script has no distinct sign.¹¹ The comparison, albeit not impeccable, should not be abandoned altogether.¹²

Jahukyan (1988, 1: 70, 2: 85, 1990: 27-28) treats a number of Hittite words as loanwords from Armenian, such as Hitt. *luzzi*- n. 'forced service, public duty, corvée' from Arm. *luc* 'yoke; burden of forced service and taxes, subjection; bondage';¹³ Hitt. *arziya*- n. 'cultivated land, agricultural resource, granary (figurative)'¹⁴ from PArm. **arc-* > *art* 'cornfield, tilled field' (from PIE **h₂eġro-*). In this paper, however, we will be concerned with loanwords in the opposite direction, that is from Anatolian to Armenian.

Historico-cultural context: 'Dragon stones/stelae'

Concerning the general historico-cultural context one might address, for instance, the problem of 'Dragon stones/stelae' (Arm. *višapak'ar*, composed of *višap* 'dragon' and *k'ar* 'stone'), stone stelae found in high-altitude summer pastures in the northern and northeastern regions of the Armenian highland (i.e. the historical provinces of Tayk', Gugark', Ayrarat and Syunik'). They are interpreted as monuments related to mortuary rituals and belong to the Middle Bronze Age (ca. 2200-1600 BC). Some are shaped in the form of a fish, on others the head and hide of a sacrificed bovid are depicted, while a third class represents a combination of both previous types.¹⁵

As burial monuments, these Dragon, or Vishap, stones have a broad semantic framework and display a syncretic set of functional, ritual and mythical features. There is a special focus on the sacrificial meal which might be organized not only at funerals but also for rain invocation rituals and festivals, such as *Vardavar*. The genealogical framework of the Vishap stones and their semantics is also complex and multilayered: Indo-European elements (compare the so-called 'Head and Hooves' ritual burial in Sredny Stog, Yamna, Catacomb, Srubna and other cultures) have been combined with

cultural features that are observable in other Caucasian and Near Eastern (especially Hittite) traditions.¹⁶

Scope of this paper

Recently, Simon (2013) offered a very valuable paper attempting to analyse critically all the Anatolian loanwords in Armenian (in total, 78) suggested until now. He concludes that instead of the assumed extended Hittite-Luwian loanword layer, only isolated and only Luwian loanwords can be found in Armenian. I agree with Simon in eliminating the majority of etymologies involved in the discussion. In some cases, however, his judgments seem hypercritical to me. Besides, the material included in his paper is not exhaustive. I therefore assume that we are not yet ready for its final evaluation and clear-cut conclusions.

Rather than give final decisions on the quantitative and qualitative characteristics of the Anatolian borrowings in Armenian, this paper merely aims to rework and supplement some of the relevant etymological material. In the section below I shall present some remarks on etymologies that are (in my opinion, too easily) rejected by Simon. In the next section I will address etymologies suggested by other scholars but remained out of the scope of Simon. Finally, in the last section I propose some of my own etymologies.

Revision of some rejected etymologies

In this section I present some remarks on etymologies that are rejected by Simon.

(1) *šelĵ* (spelled also as *šilĵ*), *i*-stem, *o*-stem (gen.-dat. pl *šelĵ-i-c'* and *šelĵ-o-c'* in 2 Paralipomenon 31.7/9; note loc.sg *i šelĵi* in Agat'angelos § 239) 'heap, mass, pile, accumulation (mainly of corn, fruits and the like)' (Bible, Agat'angelos, P'awstos Buzand, etc.).

In 2 Paralipomenon 31.6-9 (Zōhrapean 1805a: 285a; Xalat'eanc' 1899: 104) we find plural forms: nom. *šelĵk'*, acc. *zšelĵs* and *šelĵs šelĵs*, gen.-dat. *šelĵo/ic'*. Both editions have *šelĵoc'* in 31.9, and the edition of Xalat'eanc' has *šelĵic'* in 31.7. The Armenian word renders Gr. *σῶρος* m. 'heap (of corn)'. In Job 5.26: *kam ibrew zšelĵ kaloy* 'or as a heap on threshing floor' ἡ ὥσπερ θημωνιά ἄλωνος (Cox 2006: 76). In Sirach 20.30 (Nor baġirk' haykazeen lezui 2: 475a): *Or gorcē zerkir, barjrac'uc'anē zšelĵ iwr* 'He that tills the land shall increase his heap'. In Agat'angelos § 239: *yanhnarin i xor virapi and yaynmik, yorum t'alealn kayi es i mēj ōjic'n ibrew i šelĵi* 'in that terribly deep pit in which I was buried amidst piles of snakes' (Thomson 1976: 238/239).

¹¹ Compare the possible use of Hittite *h* for an *h*-hiatus before *u* (Kümmel 2014; Yakubovich 2011). For the information and references I am indebted to Ilya Yakubovich.

¹² For a discussion and literature on *Haiaša*- and related issues, see Diakonoff 1984; Fortson 2010: 382; Gamkrelidze and Ivanov 1984, 2: 912-913, 1995, 1: 807-808; Jahukyan 1964; 1976; 1987: 322-341, 279-292; 1988.1-2; Ēap'anc'yan 1947; Martirosyan 2010: 382-385; Petrosyan 2006; 2007; Xač'atryan 2012: 40-44.

¹³ For other etymologies of the Hittite word, see Beekes 2010, 1: 881-882; Kloekhorst 2008: 536; Puhvel 2001: 130-131. For the comparison between the Armenian and Hittite words, see Mkrtč'yan 1970: 59-61.

¹⁴ Cf. Puhvel 1984: 187, cf. 173-174.

¹⁵ For these stelae, see Gilbert *et al.* 2012 and especially a recently published collection *Višap k'arakot'otnera*, on which see Martirosyan 2015.

¹⁶ See Martirosyan 2015.

The word has been preserved in a few dialects, both western and eastern. In the Ararat dialect we find *sexč*, with *š...č > s...č* dissimilation; cf. *šelj* in Zak'aria Sarkawag, a 17-18th-century author from the K'anak'er village belonging to the same dialect area (Ačāryan 3: 509a).

No etymology has been recorded by Ačāryan (Ačāryan 3: 509a) and Olsen (1999: 961). According to Jahukyan (1970: 152, 1987: 314, 1990: 27), the word has been borrowed from Hittite *šēli*-c. 'grain pile, grain storage', derived from a proto-form **seljo-* (1990: 27). The nature of the form **seljo-* is not specified.

Tischler (HEG I/2, Lief. 14 S/2, 2006: 987) considers this etymology of *šelj* 'unverbindlich' without adding any further comment. Simon (2013: 112-113, 122, 128) rejects the comparison because of the problems of the initial *š*- and the vowel *-e-* (instead of the expected *s*- and *-i-*, respectively) and considers Arm. *šelj* a word of unknown origin. His objections are not cogent, however. An Armenian hissing consonant easily becomes hushing in the presence of a hushing consonant in the word. For this we have a secure case from native vocabulary (cf. **canač'em > čanač'em*, aor. *caneay*, imper. *canir* 'to know, recognize') and some possible cases from Iranian borrowings (*hrazēšt* 'permission, leave of absence, farewell, parting, renunciation, refusal' < **hrazēst*; ¹⁷ *patšač* 'suitable, proper, decent' < Iran. **patsač*¹⁸), as well as internal examples (*astičan > aštičan* 'stair', **z-oyž > žoyž* 'endurance, hardihood', *soči / šoči* 'pine tree', etc.). As far as the vocalic problem is concerned, we would indeed expect a development **ē > i* in early borrowings.¹⁹ However, we have reasons to think that the *l* had a lowering effect on a preceding *i*-vowel, cf. Syriac *abīla > Arm. abelay* 'monk'; *aseḷn* 'needle' the oblique stem of which (gen *aslan*, etc.) presupposes **asil[a]n*;²⁰ Gr. *Βασίλειος > Arm. Barsel* (also *Barsil*); Hitt. *Muršiliš > Arm. Mušel* (see below). Note that both *aseḷn* and *šelj* are sometimes spelled with *-i*-rather than *-e-*. We might also think of the Hittite oblique **seli-* (see below).

The Armenian *-j* reflects the regular development **Ri > Rj*, compare IE **h₃nōriō- > Arm. anurj* 'prophetic dream, vision', cf. Gr. *ὄναρ* n. 'dream', *ὄνειρος* m. 'god of dreams, dream', Aeol. *ὄνειρος*; **uel-i-ōh > gel-j* (gen. of *giwl* 'village'); **g^{wh}en-je/o- 'to slay' > Arm. jnjem* (**jinj-*) 'to efface, wipe clean, annihilate, destroy', cf.

Gr. *θείνω* 'to strike, slay', Lith. *geniù* 'to prune, hem'. In order to account for the form **seljo-* we might assume generalization of the Hittite case forms in **šeli-* (gen. sg. *šeliiaš*, dat.sg. *šeliia*, nom.pl. *šeliēš*, acc.pl. *šeliuš*; Tischler HEG I/2, Lief. 14 S/2, 2006: 985-986; Kloekhorst 2008: 743-744) and later thematization in Armenian. Since Arm. *šelj* has both *i*- and *o*-stems, the following scenario can be envisaged: Hitt. nom.-acc. *šeli-* and oblique *še/ēli-* yielded PArm. nom. **sēli-* and gen. **seljo-*, respectively. The latter would become **seljo- > *šelj (o)* (with the aforementioned hushing assimilation), and the nominative would be levelled analogically after the oblique stem: **sēli- > *šelji-*. The word was thematized and thus received the *o*-stem, but next to this we observe a parallel *i*-stem as a residual reflection of the old nominative **sel(j)i-*.

Regardless of minor details concerning the suggested scenario, we can safely conclude that Arm. *šelj*, *i*-stem, *o*-stem 'heap, mass, pile (of corn, etc.)' is a loan from Hittite *šēli*-c. (gen. *šeliiaš*) 'grain pile, grain storage'.

(2) **Mušel** m., a personal name abundantly attested since the earliest stages of Armenian. According to the widely accepted etymology of Ačāryan,²¹ this name is a loan from Hitt. *Muršiliš*.²² Simon (2013: 99, n. 3) rejects this connection claiming that it is 'lautlich ad hoc', and the expected form would be *†Muršil*. However, the problem of *-il > -el* is not insurmountable (see above on *šelj* 'heap of corn'). As far as the loss of the *r* is concerned,²³ we are dealing with a special development of it before the sibilant *s*: in internal position *rs* yields *rš* (ruki-rule), but in many cases the *r* disappears, although the chronological distribution of the forms with and without the *r* varies. Here is a list of relevant examples:²⁴

gološi (Sirach 22.30, Gregory of Nyssa, Book of Chries, Aristotle, Paterica, Yovhan Ōjnec'i, etc.) vs. *golorši* (Eznik Kolbac'i, Eliše, Aristotle, Philo, Grigor Magistros, etc.) 'vapour, steam'; according to my tentative etymology, *golo(r)ši* is a compound of Arm. *gol* 'warm, lukewarm, warmth' and PArm. unattested **a(w)oršiya-* 'fog, mist, dew' from **Hue/ors-*, cf. Hitt. *uarša-* 'fog, mist', Gr. *έέρση*, *έέρση* f. 'dew', etc.;

¹⁷ Considine 1979: 217. Cf. Ačāryan 3: 129; Hovhannisyan 1990: 248; Jahukyan 1987: 558, 570; 2010: 469b.

¹⁸ See Ačāryan 1979: 47 and Bolognesi 1960: 60-61 (pace Hübschmann 1897: 225). One might think that the *š* of *patšač* is due to the ruki-rule after **-i-* of **pati-* (Yakubovich, pers. com.). Note, however, MPers. and Parth. *passāč/z/z* (for the forms, see Durkin-Meisterernst 2004: 283-284; MacKenzie 1971: 66).

¹⁹ However, the case of Iranian as adduced by Simon is not relevant, since Armenian *spitak* 'white' (cf. MPers. *spēdag* 'white', YAv. *spaēta-* 'white') derives from earlier **spētak* [*speitak*] with an inner-Armenian regular development *ē [ei] > i* in pretonic position.

²⁰ See Martirosyan 2010: 115-117.

²¹ Ačāryan 1925: 393, 1940: 149, 1966, 455; Jahukyan 1970: 162; 1987: 315; 1990: 27 ('obvious borrowing'); Lap'anc'yan 1931: 36; 1956: 332; 1961: 148-149; Martirosyan 1929: 536 and n. 16; 1972: 165 and n. 6; Petrosyan 2011: 398. Toumanoff's (1969: 133) etymology of *Mušel* as composed of the place-name *Muš* and the Georgian territorial suffix *-el* is untenable.

²² Note that the name of *Muršiliš* is also borrowed into Greek (Dale 2011). For the epic / historical context uniting Lydian *Myrsilos*, Armenian *Mušel* and Hitt. *Muršiliš*, see Petrosyan 2002: 41, 147ff.

²³ Simon refers to Schmitt 2007: 68-69, but here one does not find any example of *rs*.

²⁴ Wherever no references are given, see Martirosyan 2010 s.v.v.; for the *š* as a result of the ruki-rule in Armenian, see Martirosyan 2010: 709-710.

t'ošom- (Mandakuni) vs. *t'ōrom-* (MidArm. and dial.), *t'aršamim* and *t'arāmim* (both Bible +) 'to wither';

t'uš, *a*-stem 'cheek' (13th century onwards), possibly from **tuHr-s-* or the like, cf. Czech *tvář*, Pol. *twarz*, Slk. *tvár* 'face, cheek', etc.;²⁵

xašem (T'ovma Arcruni, Grigor Magistros, etc.; dialectally widespread) vs. *xaršem* (Bible +) 'to burn, boil, stew', cf. *xarem* 'to burn, brand, cauterize' (Bible+), see Ačařyan 2: 338-339, 346-347;

kaž (widespread in the dialects) vs. *karž* (MidArm.) 'skein, hank, a length of yarn or thread wound on a reel' (see below);

kaši 'skin, hide, leather' (referring to the hide of a bull in Leviticus 8.17 and 9.11) probably from Hitt. *kurša-*, *kurši-* c. 'skin, hide, fleece; skinbag, sheepskin as a divinized fetish or talisman' (see below);

mašem (Bible +) vs. *maršem* (Paterica) 'to use up, consume, wear out, waste, corrode, spoil, destroy'. Ačařyan (Ačařyan 3: 258b) derives it from **mšs-*, cf. Skt. *maṣmaṣākaroti* 'to grind to powder' (AV, etc.) vs. *mṣmṣā-*,²⁶ OHG *morsari* 'mortar', etc. Bailey departs from the same etymon but treats the Armenian word as a loan from Iranian **mar-š-* 'to be worn out',²⁷ cf. Khot. *maṃgāra-* 'old, long continued', Av. *maršo.kāra-* (Yašt 14.28);²⁸

moš(-i) 'tamarisk; blackberry, bramble' (< **mor-s-iyā-*) vs. *mor* 'blackberry' (both Bible +; cf. also dial. *moř*), cf. Gr. *μόρον* n. 'black mulberry, blackberry', *μωρέα*, -έη f. 'mulberry-tree, *Morus nigra*'; Lat. *mōrum*, ī, n. 'fruit of the black mulberry', *mōrus*, ī, f. 'black mulberry-tree';²⁹

p'oši, gen.sg. *p'ošwoy*, gen.pl. *p'ošēac* 'dust' has been interpreted as an *i*-derivative of IE **p(o)rso-*: OCS *praxem*. 'dust' < **porso-*, *pørstь* 'dust, earth', Russ. *pórox* 'gun-powder, powder', Pol. *proch* 'dust, powder', Czech *pršeti* 'to sprinkle', Latv. *pārsla* f. 'flake, particle (snow, hoarfrost, ashes)'; these words are usually connected to Hitt. *paparši-* 'to sprinkle', Skt. *pṛśant-* 'spotted, piebald', etc.³⁰ Thus, **porsjo-* > Arm. *p'oši*, gen. *p'ošwoy*. The problem with this etymology is that an initial **po-* would have yielded *o-* in Armenian. One might solve this problem by assuming that this is a 'European substrate'

word in Armenian and Balto-Slavic to be added to a list of etyma within the domain of physical words;³¹

k'ašem (Ephrem, etc.; dialectally widespread) vs. *k'aršem* (Bible+) 'to draw, drag, pull'; an Iranian loanword, cf. MPers. *kešidan* and NPers. *kašidan* (also with a loss of *r*), ManMPers. *krš-* 'to pull, draw', Skt. *kārṣati* 'to draw, drag, plough'.³²

I conclude that Ačařyan's interpretation of the Armenian personal name *Mušel* as a loan from Hittite *Muršiliš* is unproblematic.

Overlooked etymologies

In this section I address etymologies suggested by other scholars but remained out of the scope of Simon.

(1) *akaws*, *i*-stem 'furrow' is considered a word of unknown origin³³. The comparison with Gr. *ὄψοσμ*. 'furrow, swath, line of scythed grass or grain'³⁴ is phonologically problematic. Gr. *ὄψοσμ* etymologically identical with Skt. *ājma-* m. 'passage, way' deriving from IE **h₂eǵ-* 'to drive, lead'.³⁵ The Armenian word has been compared³⁶ with Hittite *akkuš(š)a-* n. '(catch-)hole, (trapping-)pit', nom.acc.pl *akkuš(š)a*, gloss-wedged hapax legomenon in the Hittite *Gilgameš*, as well as *akkala-* c. or n. 'furrow', and the latter is sometimes linked to the aforementioned Gr. *ὄψοσμ*. 'furrow'.³⁷ In my opinion, Arm. *akaws* may be in a way related with

³¹ **h₂iH-ni-*: Arm. *eleamn*, gen.sg. *eleman* 'hoarfrost' (**ini-áman* > *(i)liamn*); BSL. **i₂nio* 'hoarfrost, rime': Russ. *ínej*, Scr. *ínje*, Bulg. *ínej*, Lith. *ýnis* (dial.), etc.

**groHd-*: Arm. *karkut* 'hail'; OCS *gradъ* 'hail', Scr. *grād* 'id.', Lith. *grúodas* 'frozen dirt or earth'; Lat. *grandō*, -inis f. 'hail, hail-storm'. For the reduplication, compare *mamuř* 'moss'.

**mo/aur-*: Arm. *mawr* 'mud, silt, marsh, swamp'; Lith. *máuras* 'mud', *maurāi* 'duckweed, silt, mud', Latv. *maūrs* 'grass, lawn', Russ. *mur* 'mould', *murók* 'meadow grass', Czech *mour* 'coal-dust, soot', Scr. *mūr* 'drift sand', *múra* 'mud, clay' (Martirosyan 2009).

**mus-r-*: Arm. **muř-*, the base of the reduplicated form *mamuř* 'moss'; Slav. **mъx-r-* 'thin moss on trees and stones'. For this type of reduplication, compare Arm. *ka-rkut* 'hail' vs. OCS *gradъ* 'hail'.

**(H)e/ouǵ-*: Arm. *oyc* 'cold', *ucanam* 'to cool down, be estranged'; Lith. *áušti* 'to become cold', Latv. *āuksts* 'cold'; Celt. **owx-tu-* > OIr. *ócht*, *úacht* (subst.) 'cold', **owg-ro-* > OIr. *úar* (adj.) 'cold'.

**iūr-*: Arm. *jur* 'water'; Lith. *jūra* 'sea', Latv. *jūra* 'sea'.

**k(e)rs-n-*: Arm. *sařn*, gen.sg. *sařin* 'ice, frost; cold' < **křs-en-*; Oic. *hjern* 'frozen snow'; Lith. *šerķsnas* 'hoarfrost', Russ. *serěn* 'crust over snow', Ukr. *serén* 'frozen hard snow'.

**ke/ol-n-*: Arm. dial. **sl-in* 'ice, frost' vs. Oic. *hēla* 'frost', Lith. *šalnà* 'hoarfrost', Scr., Bulg. *slána* 'hoarfrost', etc.

Wherever no references are given, see Martirosyan s.v.

³² Ačařyan 1979: 562-563; Hübschmann 1897: 257; for the Indo-Iranian forms, see Cheung 2007: 241-243; MacKenzie 1971: 51; Mayrhofer 1956: 176.

³³ Ačařyan 1971: 112a; Olsen 1999: 953.

³⁴ Cf. Jahukyan 1987: 321.

³⁵ Beekes 2010, 2: 1045; Mayrhofer 1992: 50-51.

³⁶ Łap'anc'yan (Kapancjan) 1931: 91-92; 1956: 338; 1961: 154; 1975: 425.

³⁷ For a discussion of these Hittite words and their etymologies, see Benveniste 1962: 107-108; Greppin 1972; Jahukyan 1970: 160 and n. 134; 1987: 321; 2010: 30a; Puhvel 1984: 23, 25; Starke 1990: 115-116; Tischler 1983.

²⁵ For references and a discussion, see Martirosyan 2010: 296-297.

²⁶ On this Indic etymon, see Mayrhofer 1963: 604.

²⁷ Bailey 1979: 321b.

²⁸ See also Jahukyan 1987: 139, 552, 605; 2010: 509-510; cf. Mkrtč'yan 2005: 300.

²⁹ Martirosyan 2010: 472-473, 474-478; 2013: 117.

³⁰ Bolognesi 1954: 152; Olsen 1999: 442-443; Pisani 1951: 65, n. 2; 1978: 307, n. 59, 395-396, n. 1; for the IE etymon, see Derksen 2008: 413, 428, 429; Kloekhorst 2008: 627-628; Mayrhofer 1996: 164-165; Pokorný 1959: 823.

akkuš(š)a- (probably of Luwian origin), although the rest is uncertain.

(2) *astuac*, o-stem 'god' is widely represented in Classical Armenian and in dialects (Ačāryan 1: 279–282). A considerable number of etymologies have been proposed for it. In my opinion, the best etymology has been suggested by Xačaturova,³⁸ according to which Arm. *astuac* 'god' may be regarded as a loanword from a directly unattested Anatolian form going back to *Aššu-Tiūaz 'good deity/lord, good Sun-god, good dawn/day' or the like, compare Luw. *Tiūaz* 'Sun God', Hitt. *aššu-šiuatt-* 'good day' (cf. Ved. *su-dyūt-* 'having magnificent lustre'). However, we should acknowledge the problematic character of a Hittite-Luwian compound.

For the typology of 'Good Deity' or 'Good Sun-god', note Hatt. *izzi-ištan* 'Good Sun-god' > Hitt. *ʾIzzištanu* (if this interpretation is correct), Lat. *Bona Dea*, Fr. *le Bon Dieu*, as well as OIr. *dagdae* < Celt. **dago-dēuos*, literally 'le Bon Dieu', etc. It is remarkable that, e.g. in an Armenian Morning Prayer from Balu, the God is referred to as *Bari K'ristos Astvac* 'Good Christ God' and is associated with the Sun God (*surb arew* 'holy sun'). A Morning Prayer from Nerk' in Basen starts with *Ov Bari lusi astvac, Hisus K'ristos ter* 'O God of Good light, Jesus Christ Lord'; the verb is put in plural as if two divinities are addressed. In a folk belief recorded by Sargis Haykuni, *Bari lusu astuc* 'God of Good light' is mentioned in contrast with evil spirits of the night; note Arm. dial. *bari-li/us* 'dawn', literally 'good light'.³⁹

(3) *Armawir* (the first capital of Armenia; the sun and moon divinities are attested there) has been interpreted as being composed of Hitt. *arma-* 'moon, moon god'⁴⁰ and Hitt. *pir/parn-*, *pir-*, *per-* n., *parna(nt)-* c. 'house, building; habitat, quarters, premises, household; estate, holdings'.⁴¹ In view of the use of Hittite *pir* also in allusion to a god's house,⁴² the basic meaning of *Armawir* may have been 'house/temple of moon god'. In order to explain the preservation of the Armenian vowel *-i-* in the last syllable, one might start with a disyllabic form, cf. Lyd. *bira-* 'house'.

My etymological suggestions

In this section I propose some of my own etymologies; some of them have been published earlier but are not included in Simon's treatment, while others are published for the first time.

³⁸ Xačaturova 1979: 373–374; for a comparison with the second member of the Anatolian compound, cf. Łap'anc'yan 1956: 279, n. 1; Simon 2013: 101.

³⁹ For references and a thorough discussion, see Martirosyan 2010a: 53–55 and forthc. See also Viredaz forthc. § 2.9 (noting also other etymological proposals).

⁴⁰ Jahukyan 1970: 161; 1987: 315.

⁴¹ Petrosyan 2010a; 2011: 399–400; 2012.

⁴² Note *šiuṇaš pir* 'god's house, temple'; see Puhvel 2013: 82–91.

(1) *leli*, gen. *lel(w)oy* 'gall, bile' (Bible +). In Job 20.14: *leli iži i p'ori iwrum* 'the venom of an asp is in his belly': *χολή ἀσπίδος ἐν γαστρίανύτου* (Cox 2006: 148); Arm. *leli* renders Greek *χολή* 'gall, bile'; (pl. *χολαί*) gall-bladder; *metaph.* bitter anger, wrath; venom'. In Elišē, Chapter 2 (Ter-Minasyan 1989: 94^{L17f}; transl. Thomson 1982: 98–99): *Yaynžam daṛnac'eal k'an zleli t'agaworn, p'luzanēr andēn i p'orin zcov kamawor maļjoyn iwroy; ew and k'it'sn ew and berann ar hasarak golorši jermamaxn elanēr, ibrew i sastik hnoc'ē cux t'anjrac'eal* 'Then the king became more bitter than gall. He spewed forth the sea of the willful bile in his stomach; from his nose and mouth issued hot vapor like thick smoke from a heated furnace'. The word is widespread in the dialects in both substantival ('gall, gallbladder') and adjectival ('bitter') meanings (Ačāryan 2: 275).

Arm. *leli* is considered a word of unknown origin.⁴³ Olsen (1999: 440) derives it from **ǵ^helh₃jom* < IE **ǵ^helh₃-* 'yellow; gall' pointing out that the expected form **jeli* 'might have been subject to (tabuistic?) distant assimilation or influenced by the semantically related *leard* 'liver'.' This etymology, albeit attractive, is not totally convincing. Besides, the initial *l-* of *leard* (from PIE **H¹iek^wr-t*, cf. Skt. *yákṛt*, etc.) itself requires an explanation and may be due to influence of **liparo-* 'fat' (cf. Gr. *λίπαρός* 'oily, fatty, greasy', *λιπαρία* f. 'fatness', Oic. *lifr* 'liver', etc.) or even Armenian *leli* 'gall, bile'. On the other hand, the problem may be in a way related with Hitt. *lišši-* n. 'liver'.⁴⁴ I therefore propose an alternative etymology for Armenian *leli* 'gall, bile'.

Formally, Armenian *leli* may have been composed of **leal-* and the suffix *-i* found in *aygi* 'vineyard', *gini* 'wine', *kogi* 'butter', *hogi* 'soul', *mak'i* 'ewe', *tehi* 'place', etc.,⁴⁵ with regular sound change *ea* > *e* in pretonic position, cf. *leard* and gen. *lerd-i* 'liver'. Note also *kaši* 'skin, hide, leather', possibly from Anatolian **ǵ^wrso/i-* (cf. Hitt. *kurša-*, *kurši-* c. 'skin, hide, fleece') and *p'oši* 'dust', if from **porso-* (cf. OCS *praxsm*. 'dust', etc.). This theoretical base **leal-* might go back to Hittite *lišši-ala-*, which has been interpreted as 'liver-related, pertaining to the liver', a derivative of the aforementioned word, *lišši-* n. 'liver'.⁴⁶ Such a borrowing could be possible only at a very early stage, when the loss of old **s* was still in operation. The semantic development can be explained by the fact that the bile is secreted by the liver. The ancients must have been aware of that (note, e.g., Horace, *Carmina* 1.13.4: *meum fervens difficili bile tumet iecur* 'my burning liver swells with hard bile').

⁴³ Ačāryan 1973: 275; Jahukyan 2010: 294b.

⁴⁴ For references and an etymological discussion, see Kölligan 2012: 136 and n. 11; Martirosyan 2010: 307; Olsen 1999: 191–192; Schindler 1966.

⁴⁵ For an extensive discussion on this suffix, see Olsen 1999: 432–452.

⁴⁶ Chicago Hittite Dictionary *L-N*, 1989: 72b; Kloekhorst 2008: 525; Puhvel 2001: 97–98; Tischler 1990 [L-M]: 54–55.

On the other hand, Armenian *lehi* ‘gall, bile’ may be compared to the North Caucasian word for ‘liver’, which is reconstructed as **HlālV* (the *l̥* is a lateral affricate)⁴⁷ and has been compared to the IE aforementioned word **Hiekw-r/n-* ‘liver’.⁴⁸ The relationship between these two proto-forms is dubious. The connection of Armenian *lehi* ‘gall, bile’ with this North Caucasian word should not be excluded, but the nature of relation is uncertain.

(2) *kaši* (gen.sg *kaš[w]oy*, gen.pl *kašeac*: Nor *bağirk*‘ haykazean lezui 1: 1052c) ‘skin, hide, leather’ referring to the hide of a bull in Leviticus 8.17 and 9.11; widespread in the dialects (Ačaryan 2: 518b). The word is usually treated as a Semitic loanword, cf. Akkad. *kūšu-* ‘skin, hide’,⁴⁹ etc.⁵⁰ However, the vocalism is unclear. Olsen (1999: 941) places *kaši* in her list of words of unknown origin.

I alternatively propose to derive Armenian *kaši* from an Asiatic culture word, cf. Hitt. *kurša-*, *kurši-* c. ‘skin, hide, fleece; skinbag, sheepskin as a divinized fetish or talisman’.⁵¹ The group CuRCV may reflect **CuRCV* or **K^wRCV*.⁵² Therefore, Hittite *kurša/i-* (perhaps also Greek *βύρσα* f., *βυρσίς* ‘skin, hide’)⁵³ may be derived from a (probably non-Indo-European) proto-form **g^wṛso/i-*, which would yield Armenian **ká(r)š(o/i)-*, with a later *i*-suffix.⁵⁴ For the latter, compare a synonymous word, *mort’-i* vs. *mort’*, *o*-stem ‘skin, hide, leather’. For the ruki-rule and the loss of *r* before *š*, see above on *Mušel*.

(3) *karž* ‘skein, hank, a length of yarn or thread wound on a reel’, *karžar* ‘reel, winder’ (both are Middle Armenian according to Norayr), *kaž* (widespread in dialects). No etymology is offered in Ačaryan 2: 550b. The comparison with Gr. *γυργαθός* m. ‘wicker-basket, creel’⁵⁵ does not inspire much confidence. It is tempting to compare Arm. *karž* to Hitt. *karza* / *karzan-* n. ‘spool, bobbin (vel sim.)’. The latter has been derived from **k(e)rt-sr/n-* ‘a spin’, cf. Ved. Skt. *kart-* ‘to spin’, etc.⁵⁶ The *ž* of Armenian *karž* is not clear, however.

(4) *hazar* ‘lettuce’ (Eznik Kołbac’i, Anania Širakac’i, Grigor Magistros, etc.); Xarberd dial. *hazar-maruli*, with synonymous *mař/rul* as the second member of the compound (Ačaryan 3: 6b). No reliable etymology is recorded in Ačaryan 3: 6b or Jahukyan 2010: 437b. I tentatively propose a comparison with Hittite *hašuššara-* (*ha-šu-uš-ša-ra-a-an* in KUB 7.1 i 21, KBo 24.7 iv 19, *ha-šu-uš-ša-ra-an* in KBo 13.248 i 5), a garden vegetable. In KUB 7.1 i 21 it is mentioned in a list of vegetables between *hazzuwaniš* ‘lettuce’⁵⁷ and *lakkarwan* ‘legume’.⁵⁸ It is unclear whether this plant name is related to Hittite **hašuššara-* ‘queen’. In view of the consistent single spelling of the first *-š-* of the plant name, Kloekhorst (2008: 328) is sceptical about that connection. Since it is listed next to the lettuce, one is tempted to assume that it referred to a kind of lettuce or at least a similar vegetable and was borrowed into Armenian as *hazar* ‘lettuce’. One might also consider contamination with the aforementioned *hazzuwaniš* (if meaning ‘lettuce’), as well as a folk-etymological reinterpretation influenced by homonymous *hazar* ‘thousand’.

Should this etymology be accepted, Arm. *hazar* will join other Anatolian borrowings in the domain of agriculture, such as *laxur* ‘apium (celery, parsley)’ and *torr* ‘vine-shoot’ (see Simon 2013: 107–109, 116–117, 127–129, with a positive conclusion).

(5) *hasteay*, only acc.pl (z-) *hasteay-s* ‘a kind of pastry’ (Jeremiah 44.19 and Ephrem Asori), perhaps in a way related with Hitt. ^{NINDA}*haz(z)ita-* ‘a kind of cake’ (Martirosyan 2010: 391, 397–398). This is uncertain, however. According to Viredaz (forth. § 1.2.4 and pers. com.), *hasteay* has been borrowed through Syriac from Ecclesiastical Latin *hostia* (4th cent.) ‘offrande de son corps (martyre); victime eucharistique, hostie’ (note Latin *hostia* ‘a sacrificial animal’).

(6) *targal* ‘spoon’ (attested in Movsēs Xorenac’i 2.47 and ubiquitous in the dialects) has been derived from PIE **d^hu-*, a zero-grade form of the PIE word for ‘wood’. A perfect semantic match is Skt. *dārvi* f. / *darví* f. ‘spoon’, though this has a full grade in the root, cf. Arm. *torg* ‘wooden framework, loom’ and HLuw. *tarw-i(ia)-* prob. ‘wooden beam’; further, note Arm. *tořn* ‘pestle’ vs. Skt. *drōṇa-* n. ‘wooden vessel, trough, bucket’.⁵⁹ Now we have a wonderful match that can also solve the problem of the suffix of Arm. *targal* ‘spoon’: Hitt. ^{GIŠ}*taru-āli-* n., which refers to an implement used for grinding or crushing, probably something like ‘pestle’, cf. CLuw. *taruūal-* ‘mortar’.⁶⁰ For **-al(i)* in designations for implements or the like cf., e.g., Hitt. ^{GIŠ}*hulāli-* n. ‘distaff’. Therefore, Arm. *targal* may be treated as a Hittite loanword.

⁴⁷ See Nikolayev and Starostin 1994: 586, cf. 18.

⁴⁸ Starostin 1988: 117. I am indebted to Vahagn Petrosyan for this reference.

⁴⁹ For this word, see e.g. Chicago Assyrian Dictionary 8, 1971: 602b.

⁵⁰ Ačaryan 1973: 517–518; Jahukyan 1987: 452, also 2010: 383b, with some hesitation. For a different view, see Greppin 2008.

⁵¹ For attestations and a discussion on the Hittite word and its ritual aspect, see Haas 1994: 187–188, 451–452, 454–456, 510, *et passim*; Ivanov 1964; Ivanov and Toporov 1974: 35f; Popko 1974; 1978: 108–120; 1994: *passim*; Tischler 1983: 654–657; and especially Puhvel 1997: 270–275. On the ritual aspect within the Armenian context, see Martirosyan 2015.

⁵² See Kloekhorst 2007.

⁵³ For more etymological detail on the Hittite and Greek words, see Beekes 2010, 1: 249; Gamkrelidze and Ivanov 1984, 2: 902, 909; Puhvel 1997: 274–275; Tischler 1983: 655–657.

⁵⁴ One might assume that the *i*-suffixation was triggered by a possible by-form **g^wṛsi-*: Hitt. *kurši-* and Gr. *βυρσίς*.

⁵⁵ Jahukyan 2010: 392a; for the Greek word, see Beekes 2010, 1: 293.

⁵⁶ Kloekhorst 2008: 459–460; Puhvel 1997: 117; Tischler 1983: 531–532.

⁵⁷ According to Farber (1991, see also Simon 2015), however, this Hittite word denotes ‘a type of onion or garlic’ rather than ‘lettuce’.

⁵⁸ Puhvel 1991: 241, 286; 2001: 37; cf. Tischler 1983: 211.

⁵⁹ For a discussion of all these words, see Martirosyan 2010 s.vv.

⁶⁰ Martirosyan 2010: 606–607 and 2013: 106–107.

(7) **tup**⁴, o-stem (gen.pl *tp'oc'*) 'case, box, chest, censer' (Bible +). No reliable etymology has been recorded.⁶¹ I propose to treat this word as a loan from Hitt. ^{GiS}tuppi- 'ark, container'. In Bo 2326 (= KUB LIII.4) Rs iv 32 it refers to an ark or container into which the statue of Telepinu is put: *I-NA UD.6^{KAM} Dte-li-pí-nu-un¹ GiS⁴tup-pí an-da ti-an-zi pé-da-aš-ša-aḫ-[ḫa-an-zi]* 'Am 6. Tage legen sie den Telipinu in die Lade hinein (und) bring[en ihn an Ort und Stelle (an seinen Kultplatz)]' (Haas / Jakob-Rost 1984: 76 / 78). This is reminiscent of the Biblical ark of the covenant (Weinfeld 1993: 466). The word is also attested in the form ^{GiS}tuppa-⁶² and seems to be identical with ^Éd/tuppa- 'storehouse'.⁶³

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⁶¹ See Ačařyan 1979: 430b; Ėahukyan 2010: 735b Olsen; 1999: 957.

⁶² See Otten 1973: 16–17; 1988: 40; cf. Neu 26, 1983: 201, n. 586.

⁶³ For a discussion of this word, see Beal 1992: 52–54; Otten 1988: 40.

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Main Results of the Excavations at the Fortress of Getap in 2009-2014

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Abstract: While exploring the area between the Yeghehis and Arpa rivers in Vayots Dzor marz, Armenia, the expedition of the Institute of Archaeology and Ethnography, NAS RA revealed an entire network of fortress-settlements of the Urartian period situated on the hills at a close distance from each other. One of such sites – the fortress of Getap 1 was a chain in the defence system created by the Urartians to control an important strategic and trade route, which led from the Araxes River to the Sevan Lake basins.

The excavations of the fortress of Getap 1 have been held since 2007 and revealed an impressive picture of building works performed in the 7th-5th centuries. Actually, the entire scenery of the hill had been artificially reshaped by a uniform composition and planning with a large investment of means testifying to the implementation of a 'target state program'.

Key words: Iron Age, Urartian Empire, Getap 1, fortress-settlement, pillared hall, sacred platform, building technique, Early Armenian and High Medieval Periods, earthenware

The Getap 1 fortress is situated 1.5km north of the village, on the oval top of a 50m high hill sharply sloping to the right bank of the Yeghehis river (Figures 1-2). The citadel once surrounded by a settlement (about 2ha) below occupied the area of 2050m² enveloping the top of the hill and part of its slopes (Figures 3). No traces of fortified walls surrounding the settlement at the foothill had been found as its vicinities were turned to plough-land and gardens already in the Soviet period.

The excavations focused on the citadel built according to the principle of getting maximum advantage of the position. The fortified walls were erected on the relatively smooth surface of the top and rocks on the slopes by the perimeter of the hill. To erect the wall in places where the rocks stood far cut from each other a prop wall foundation was built to fill in the distance between them. In certain sections to receive the vertical cut of the walls uneven surfaces of the rocks had been smoothed and hewed (Figure 5).

As a result of excavations we unearthed 23m long stone part of the northern wing of the fortress wall reaching 2.20-2.50m in height with the central and north-eastern towers (3.70 × 3.70m) and recesses made in the bedrock for laying the foundations of the north-western corner tower (Figure 4).

The eastern fortified wall beginning from the north-eastern corner tower ascended up the northern slope to the top of the hill where we found the traces of one central buttress and a corner tower, then descended along the sharp southern slope.

The excavations of the southern section of the eastern wall (Sq. 9C-12C, 9D-12D) started from the corner

buttress in the citadel's eastern wall and continued below at the steep southern hillside. As a result of works we unclosed the bedrock (11.0 × 5.0m) with a half destroyed 0.5m long projection of the buttress on it and an 11m long section of the wall façade built on the edge of that steep slope almost totally ruined. Relatively well preserved were only some sections of the lower part of the wall and intermediate filling ensuring its width (2.40m). Excavated was also 2.5m wide area between the fortified wall and the continuation of the eastern wall of the central hall. It descended down the southern slope, adjoining the eastern hallway to the central hall on the north. Partition walls crossing that area suggested the existence of small adjacent rooms (2 × 2.50m, 3 × 2.50m and 3 × 2.50m) that contained almost no traces of material culture probably because of being washed out down the slope.

The western fortified wall stretched southwards from the north-western tower along the edge of the bedrock with a buttress on top similar to those in the eastern wing. The western slope of the hill is very steep, descending almost vertically to the flow at the foothill. Maybe that was the reason why the western wall was built on its very edge not to decrease the scanty area on the top, which caused its total destruction. Therefore the southern section of the western wall is represented only by stair-shaped smoothed and hewed surfaces of the bedrock stretching to the protruding rocks on the west (Figure 6).

The towers and buttresses projecting beyond the general surface of the fortified walls about 0.50 – 0.60m, which is characteristic of Urartian fortifications. Two-faced masonry of the fortified walls is laid of rough massive pebbles with the intermediate filling by stone-



Figure 1

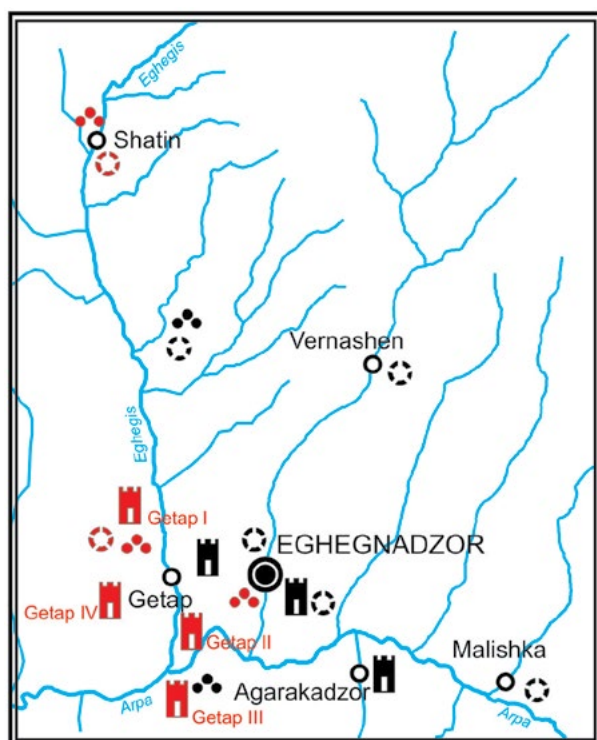


Figure 2

clay mixture. Maximum preserved height of the stone wall – with the traces of adobe brick masonry over it reaches 2.50m, and width – 2.80m.

On the top of the hill we unearthed a columned hall (interior surface – 12.00 × 12.50m, surface of the pillars – 2.10 × 2.10m) adjoining two interconnected rooms in the eastern side. The hall was connected with the rooms through a 0.90m doorway in the centre of the eastern wall. As a consequence of different levels of the bedrock the hollows in the floors of the hall and rooms were aligned by up to 50cm thick filling of tramped down mixture of gravel and clay and then plastered by about 30cm thick layer of clay. Excavations of the hall and adjoining rooms showed that they had been used also in the later periods as the variety of artefacts found there belonged not only to the Urartian, but also to post-Urartian, Achaemenid and medieval periods. Thus in the southern wing of the hall (Sq. 9F, 9G, 9H) we unclosed the remains of the post-Urartian and medieval walls, household pits, *tonirs* (hearths), bases of *karases* (pithoi), 3 other storage pits in different diameters, which were measured, fixed on the layout and removed (Figures 7-8) to proceed with finding out the initial



Figure 3



Figure 4

planning of the Urartian hall and other structures in this section. These later installations were dug into the filling of gravel and clay to the depth of almost 70cm. After their removal we unclosed the original pavement of this section and the entrance to the hall (1m wide) made in its southern wall. 0.5m west of the one of storage pits and 2.50m west of the first pillar of the hall

where opened the third pillar of equal size with the first and second ones and on equal (2.40m) distance from the wall (Figure 9).

The last layer of the floor filling yielded the fragments of Urartian earthenware: an oil lamp, a black burnished bowl, a pitcher, etc., and – almost on the bedrock at the western side of the third pillar – a small abalone golden button (5cm in diameter), which being of smaller size copied the form and the engraving of that type of the Urartian buttons. With unclosing the fourth pillar at the distance of 3.20m of the southern wall masonry the layout of the hall was fully clarified.

It should be noted that in the course of excavations carried out for years we unearthed over twenty Christian burials in the upper layer of the hall. A silver coin found in one of the tombs is dating from the reign of the Hulaguid Abu-Said Khan (AD 1317-1335). The burials made in or after that period suggested that by that time the fortress lost its initial assignment and was turned into a cemetery.

Excavations at a rather steep slope between the northern wall of the hall and the northern section of the fortress revealed the remains of structures built



Figure 5



Figure 6

according to the Urartian building technique – stair-shaped stone foundations for three back walls made of stone with mud brick superstructure (the first – $4.20 \times 1.90\text{m}$, the second – $5.30 \times 1.70\text{m}$, and the third – $6.70 \times 1.70\text{m}$). There were two compartments of economic purpose. The first one ($5.30 \times 4.90\text{m}$) is situated between the eastern section of the fortification wall and a separate back wall was divided to two equal parts by



Figure 7



Figure 8

a short wall (1.5m) in the centre to support the span of the logs. The entrance (0.90m) to that compartment was made in the second back wall opposite the northern part of the fortification wall. Presumably it was a basement as we found a large number of earthenware, stone instruments, animal fossils and a hearth fitted to the recess in the bedrock adjoining the western back wall. The hearth that was full of ashes, burnt bones and sooty fragments of earthenware witnessed in favour of this suggestion. The ceramics unearthed at the basement belonged to the Urartian and post-Urartian periods (7th-4th cent. BC). The thickness of the back walls and the partition wall in the first compartment, as well as a thin layer of the ceiling found in its southern side suggested that it should be a two-storey building, and the floor of the second storey was at the same level as the floor of the buildings of the top of the hill.

Here too above the earliest Urartian layer there were the traces of a later building activity with medieval material: a thick adobe medieval floor between the first

and second back walls, above the earliest materials (the hearth, ceramics, etc.), which suggested that the second floor of the earlier structure was already destroyed in the medieval period.

There was another medieval building horizon with the ground levelled on the second back wall where we saw the remains of a wall with oblique stonework adjoining the northern wall of the structure on top, which by its building technique resembled the curve walls found in the hall (Figures 10).

The bedrock under the second compartment was on a higher level. It represented a cellar with two rows of pithoi (*karases*) – three in each row (Figure 11). The pithoi were set into the ground filled on the bedrock. From the east and north the cellar was limited by sloppy one-layer walls, while on the west there was the third back wall. Fragments of the lips and bodies of typically Urartian pithoi with rope-shaped or indented triangular ornaments found in the cellar testified that they belonged to the Urartian period. When two of the pithoi had been broken smaller ones were placed into them without removing the main part of their body. The calcareous sediment on the bottom of several pithoi served for refining wine. Like the first compartment this one was also used in the classical and medieval periods as witnessed by the post-Urartian and medieval pottery, a levered millstone, the main part of a *tonir* preserved in the centre of the third back wall and three small hand-made vessels found in one of the pithoi.

The surface of a higher bedrock west of the cellar was smoothed for building the north-western corner of the large construction on the top. Another section of the rock ledge was hewed to be used as a cornerstone tying the masonry of the northern and western walls of the hall.

The excavations at the southern part of the central building (Sq. 10H, 10G, 10F, 9-10E, 9-10D) revealed four walls attached to the wall of the hall (L – 4.0m; W – 1.5-2m), which divided the area to three 4m long compartments. After removing the ground we found a clay mass covering the entire area, which seemed to be the rows of the mud brick masonry (Figure 12).

Medieval layers over the mud brick deposits covering the site (sections of walls, remains of *tonirs*, ceramic fragments, among which we found a bronze pinhead, fragments of small metal bars and plates, a bridle, one bronze and two small cornelian beads, part of a bone instrument and fragments of glass) were poorly preserved (Plate 6.1, 3-13; Plates 9-10).

To find out the structure of the thick clay layer we made a vertical cut in the second room interconnected with



Figure 9



Figure 10



Figure 11

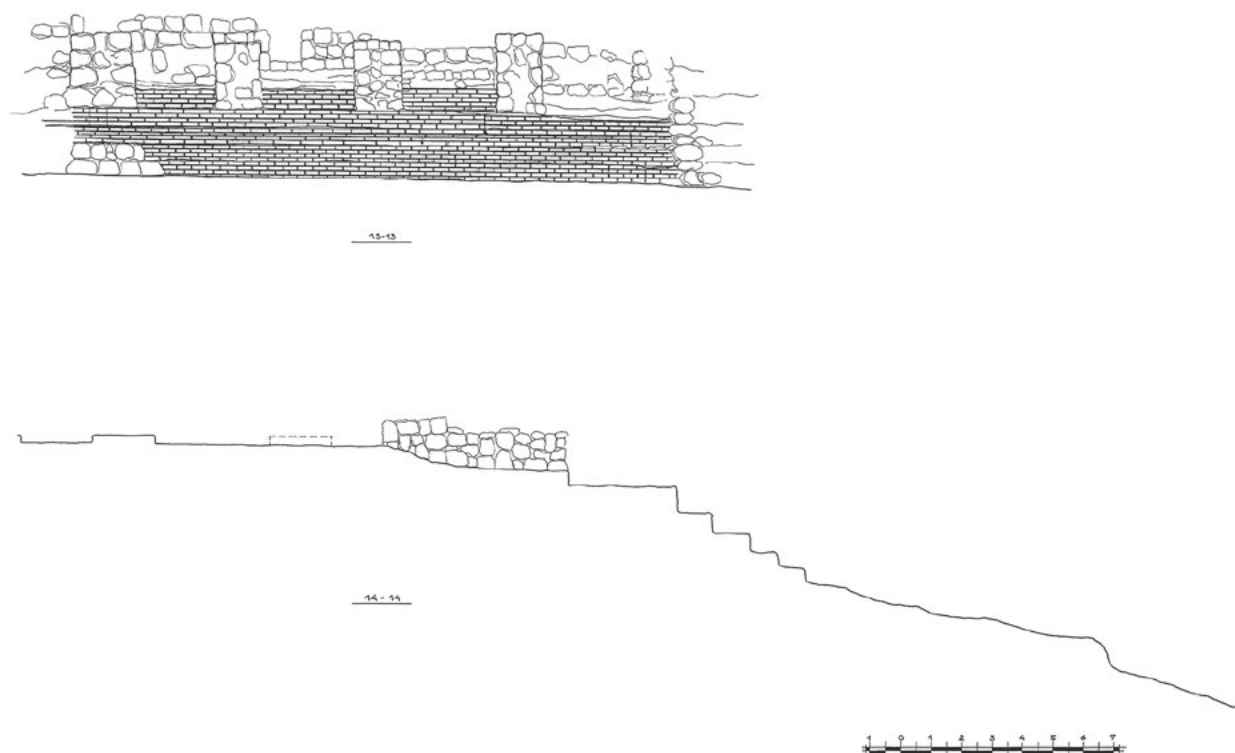


Figure 12

the hall through the doorway and discovered six rows of the mud brick wall (Figure 13). As there were visible traces of mud bricks on the continuation of the slope we made a small exploration shaft at the bottom of the western wall of the same room, which showed that they never fell, but had been laid in regular horizontal rows, amid which the 1.70m high stone walls were erected (Figure 14).

To determine the height of the bricks the face of the bricks opposite the door was carefully cleaned up. The height of the lower layers was 14-15cm while the upper layer bricks have 16-17cm high. The length of the mud bricks varies between 51.10-52cm – fully in accord with the Urartian standards. The gaps between the bricks and layers were filled by 1-2 or sometimes 5cm thick fine reddish gravel maybe for binding or for absorbing the moisture. These layers of brick stretched from east to west along the entire width of the southern slope. The exploration shaft also showed that the layers of brick were laid on the foundation of thoroughly levelled smooth pebbles. A vast section levelled by such pebbles stretching from the east and joining the western wall of the fortress had been also opened at the western side of the southern slope.

The excavations carried at the area adjoining the south-western corner of the central hall (Sq. 10G-12

G) revealed that the western wall of the hall continued down the slope, preserving its width of 2m. After removing the heaps of ground and huge pebbles fallen from the medieval structures covering the wall we unearthed a 15m long section of that stone wall, which appeared to be its lower part. It was built on the slope by gradual falls – typical for Urartian building tradition. Thus after stretching 6.5m south of the hall's wall a 70cm deep stair was made, then the wall continued horizontally for another 8.40m. At this level we unclosed the upper – mud brick masonry of the wall, which was badly damaged by a pit (Diam. – 0.86m, Deep. – 0.70m) reaching the stone masonry. On the bottom of that pit, i.e. just on the stone foundation we found a pebble polisher, an upper part of the millstone, fragments of different bowls and lips of *karases* that belonged to the post-Urartian period. The wall continued along the southern slope for another 1.5m then abutted the prop wall at a right angle.

The excavations at the area west of this wall (Sq. 11H-14H) revealed the remains of medieval walls and *tonirs* with stone instruments and ceramic fragments in (Figure 15), which were documented and removed. In the lower layer we found rooms directed to the east that were built by means of binding four parallel walls to the western section of the fortress wall. The fifth back wall that went at an angle to the fourth one was descending



Figure 13



Figure 14

gradually from west to south then occurred under a later wall stretching from the south to north. The continuation of that wall was found while excavating Sq. 15G at the southern section. After removing the debris with mud bricks destroyed and fallen as a result of active use of this area in the Middle Ages there opened a perfectly preserved 17.0m long sections of the fourth



Figure 15

and fifth back walls (H – 1.5m, W – 1.80m). These pebble walls were built after levelling the uneven surface of the bedrock by yellow-reddish gravel and clay plaster. Fragments of the earthenware: upper part of a pithos, flat base of the bowl, a fragment of a burnished jug, etc., found in the 20-30cm thick layer of ground dated from the Urartian-Early – Armenian periods. Most important among the finds were the ‘Scythian’-type arrow heads unclosed in the rooms at Sq. 11H and 13H.

As a result of clearing works carried at the extreme south section of the western wall (Sq. H-14, 15 and G 14, 15) there outlined the foundations of a large tower and the remains of the sixth wide wall stretching down southwards.

Excavations at Squares 10D-12D, 10E-12E and 11F-13F on the southern slope of the hill had been most labour-intensive and strenuous. Here we unearthed a large platform (L – 16m, W – 15m) built of bricks on stone foundation that seemed to be limited by the wall stretching through Squares 12D, 12E and 12F. Beneath the wall we cleared the weathered surface of the southern slope with visible stair-shaped recesses and a few stones on them. The western side of the stone masonry (7.50 × 5.0m) opened there was raised to the level of the hewed edge of the hill bedrock. To find out the function of that stone masonry and the purpose of smoothing the edge of the bedrock we excavated Squares F15, F16, E16, D15 and C15 and unclosed a 1.7-1.8m high structure vertically cut in the bedrock with a 6m long façade and western and eastern wings – respectively 3 and 6m long. In the central part of the façade there was a 70-80cm high altar (1.60 × 1.60m) built of small and medium size stones leaned on the rock wall (Figures 16). The surfaces of both wings contained door-shaped niches: two cut on the surface of the rock in the eastern wing and one – on the western wing. By its form the site



Figure 16

resembled the famous ‘Gate of Haldi’ specifically that carved on the surface of the extreme western rock of the hill in Armavir.¹

Excavations carried for the purpose of finding the remains of the second tower south-east of the first one yielded no results. Almost no walls had been preserved in this section as the inhabitants of Getap rolled the stones down the gentle slope to the village to build their own houses. Preserved were only the bedrock foundations of the tower representing a stair-shaped bevel cut rocks. Bedrock foundations cut from the inside – a characteristic feature of the Urartian architecture, had been unearthed in almost every section of the Getap site.

Even though the gates of the fortress have not yet been revealed seven stair-shaped recesses ascending to the eastern part of the massive protuberant tower looking southwards might be the stairs leading to the gates. The upper – seventh stair was much wider resembling rather a platform. It stretched to the east, then turned and went uphill joining the stairs leading to the hall on the north (Figure 17).

Due to the relief and active use of the hill in Middle Ages the material found there was rather scanty. However



Figure 17

the earthenware, tools, household items, jewellery and weaponry were sufficient to reveal the three phases of the fortress existence. Noteworthy samples of the Urartian ceramics were represented by fragments of very thin handles of vessels, metal artefacts – a bronze ‘Scythian’-type arrowhead identical to those found en mass earlier, one piece iron signet-ring, sardonic, bronze, bone and glass beads of various sizes.

The surface material and the vast variety of different artefacts and earthenware found during the excavations at Getap 1 mainly related to the Urartian, post-Urartian – Early Armenian and medieval periods.

Distinguishing among the Urartian earthenware were thick-walled Urartian pithoi with wide concave belts and large triangular indented ornaments, two fragments of which bear the hieroglyphic signs indicating their capacity (Plate 1). Quite typical were also the fragments of cigar-shaped vessels for beer, one of which before baking was marked by the potter’s cross-shaped sign. There were large numbers of fragmented troughs, two-handled pitchers and bowls. Some of them bore engraved sagittal or other symbols, indented ornaments characteristic of the Urartian vessels (Plates 2-3).

Samples of the Early Armenian material culture often discovered alongside with the Urartian pottery were represented by finely decorated lips of the vessels, fragments of burnished bowls, pithoi, troughs, bowls, jugs and levered millstones (Plate 4). Of special note was the presence of three-winged ‘Scythian’-type arrow-heads (Plate 6.2).

The medieval culture was represented by quite characteristic samples of earthenware, metal and stone instruments, and types of decoration (Plate 5; 6.3, 5, 13).

¹ Karapetyan 2014: 131; Tiratsyan, Karapetyan 1991: 159.



Plate 1

In the thick layer of ashes covering the area of two square meters adjoining the inner side of the northern wall we found over twenty sheep knucklebones most of them having been symmetrically drilled through (Plates 7-8). Important was also the find of a fragment bearing the mark of the Urartian potter.

Excavations at the Getap fortress showed that being founded by the Urartians this fortress still existed in the Early Armenian period, after which it was for some reasons abandoned. Upon a long interval it was re-inhabited anew in the 12th-13th centuries then left again turning to a graveyard (13th-14th centuries).

In spite of the limited time and possibilities of the expedition the results received enable to make some preliminary conclusions.

The principles of selecting the site for building fortifications, the peculiar features of their construction, a clear separation of the settlement components (a citadel on the hill and the settlement below), citadel planning and nature based on placing the pillared hall in the centre surrounded by the groups

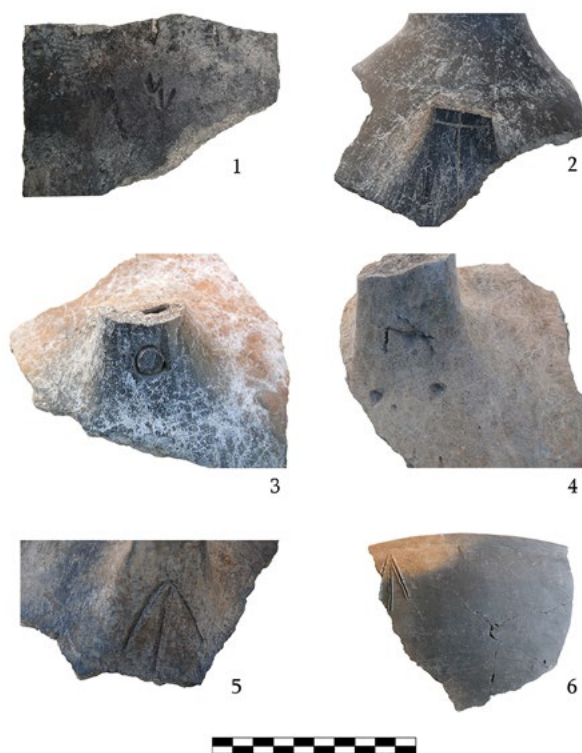


Plate 2

of rooms,² joint use of the stone and mud brick masonry, a discernibly Urartian assortment of the earthenware and the potters' or capacity marks, which have wide parallels in other Urartian sites,³ as well as absence of the materials of earlier epochs enable us to state that the fortress had been founded in the Urartian period and existed in the following periods.

The expedition received very important information concerning the principles of the Urartian fortification:

- Firstly they applied the principle of the maximum use of the entire surface of the fortress;
- Initially they built up the smooth quadrangular area (25.50 × 25.50m) on the top of the hill erecting the corner towers and buttresses being the axis of the layout and spatial composition of the Urartian citadel, and the pillared hall with four pillars being functionally the centre of gravity.
- Other structures were built around the hall considering the possibilities provided by the area. Such planning solutions are met in many fortresses, specifically in the fortresses of Solak,⁴ Odzaberd-Tsovinar⁵ discovered lately.

² Ghafadaryan 1984: 126-127.

³ Kozbe *et al.* 2001, Plate VIII, 13,14; IX, 1-15; X, 3,6; XI, 2,12; XV, 19, 20; Martirosyan 1974: 73-75, Figures 36b, 47, 50a-53, 74-75, 79-80; Yesayan and Kalantaryan 1988, Table XLIX, 1,2; L. 1-16; LVII, 4-8.

⁴ Petrosyan *et al.* 2015: 65-67.

⁵ Biscione 2003: 182.

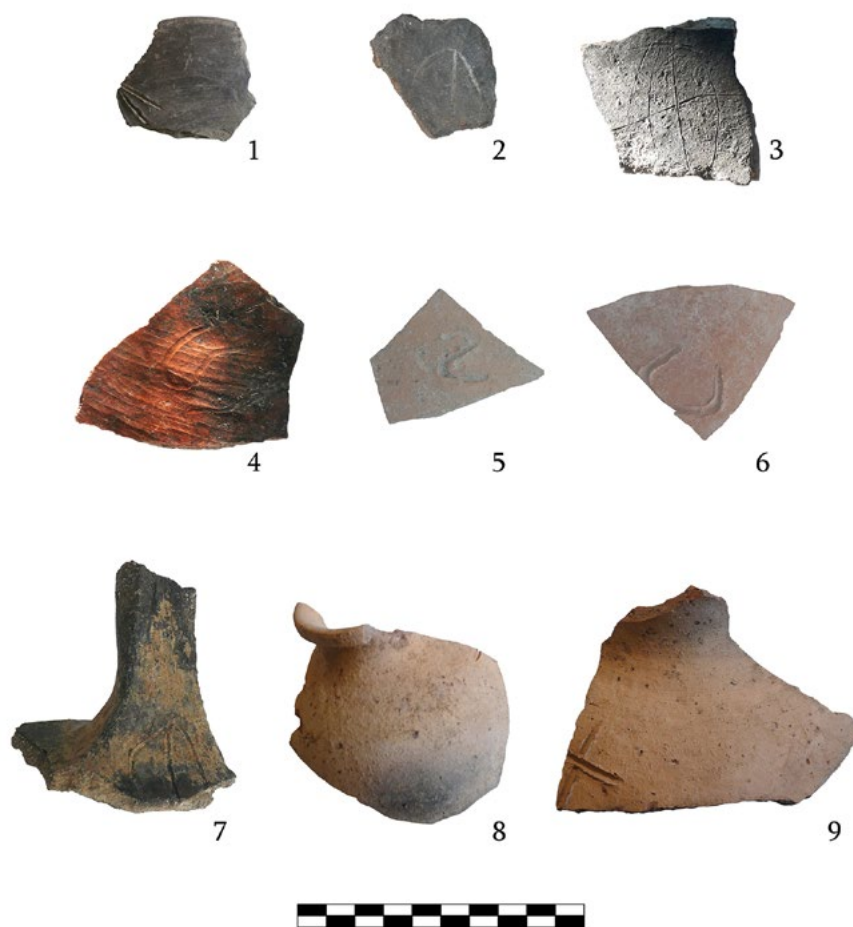


Plate 3



Plate 4



Plate 5

– To build up the steep slopes outside the southern and northern walls of the central hall on the top they erected terrace-platforms. Especially noteworthy was that on the southern slope stretching for 28.50m from the eastern fortification wall up to the western one. These walls had been supporting the platform on the sides while the southern part of the platform should be supported by a very wide back wall stretching through squares 12D, 12E and 12F since the remains of the brick layers were visible on the slope up to that wall at the length of 18m.

– To ensure the strength and seismic resistance of the heavy mass of the platform it was strengthened by a carcass of crossing stone walls laid among the bricks along the length and width of the platform. Such an early application of this building technique – laying a carcass of crossing stone walls within a clay mass, is recorded in the Armenian Highland for the first time although similar technique has been applied in organizing the southern wing of the peristyle yard of

‘Susi’ – the temple of Haldi on the top of Armavir hill⁶ in the reign of Sarduri II.

Structures erected on such terrace-platforms were founded on the stone back walls below, which supported the mud brick superstructure.

Thus the excavations at Getap 1 revealed an impressive picture of building works performed in the 7th-5th centuries. Actually the entire scenery of the hill had been artificially reshaped by a uniform composition and planning with a large investment of means testifying to the implementation of a ‘target state program’.

The stratigraphy of Getap 1 and comparison of the materials acquired during the excavations with visible sections of structures and surface material collected at the above-mentioned sites of archaeological interests leads to the conclusion that other fortresses were also built on some of the hills of Vayots Dzor *marz*.

⁶ Karapetyan 2010: 36-43.



Plate 6

The sizes of the forts built along the basin of the Yeghegis river, the principles of their installation and development, their interconnection through luminous or maybe even sound signal suggest the creation of a tough defence network at the Urartian period.

Eminent orientalist M. Nikol'skij expressed an opinion that the Urartian kings Sarduri II and Rusa I entered the lake Sevan basin from the south and south-west.⁷ The first attempts to conquer the basin of lake Sevan were undertaken by kings Ishpuini and Minua, who moved to the north by the road of Sisajan – Hors – Kot passing through the plain of Sharur. Based on this it could probably be assumed that the fortresses discovered in the area between Yeghenadzor and Getap settlements had been the most important military bases, from where the Urartian rulers moved forward to the north and east.

Since the most ancient times the selection of the place for fortification was conditioned by the considerations of defending the road junction Areni-Yeghegis being the most important strategic and trade transit rout,

which led from the south and south-west to the north and east, and the domineering position of the hills over the river valley. Since the Stone Age throughout the Middle Ages and up to now the most important road⁸ passed through this area and the fortress Getap 1 was but a chain in the defence system created by the Urartians.

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⁷ Nikol'skij 1896: 112.

⁸ Chataigner and Barge 2010, Figure 13; Harutyunyan 1968: 113–220; Manandyan 1984: 192–213; Zhamkochyan 2005: 39–43.

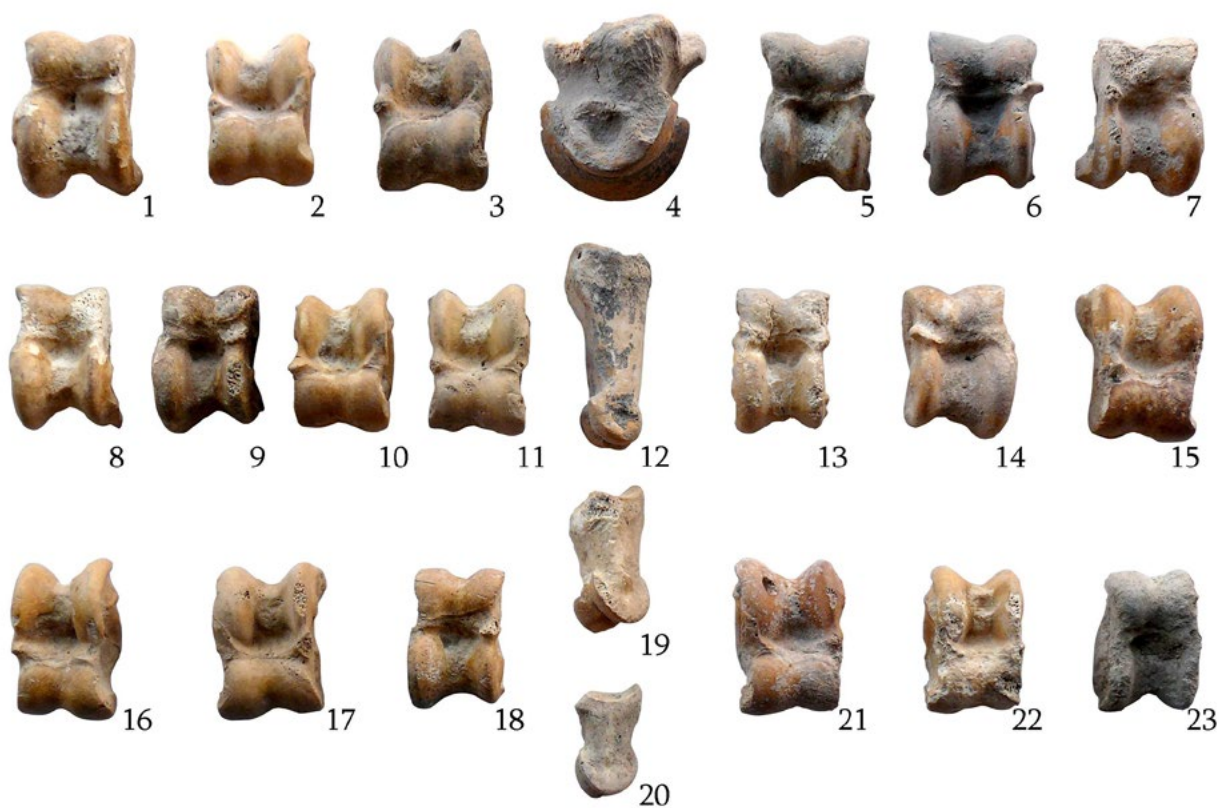


Plate 7



Plate 8

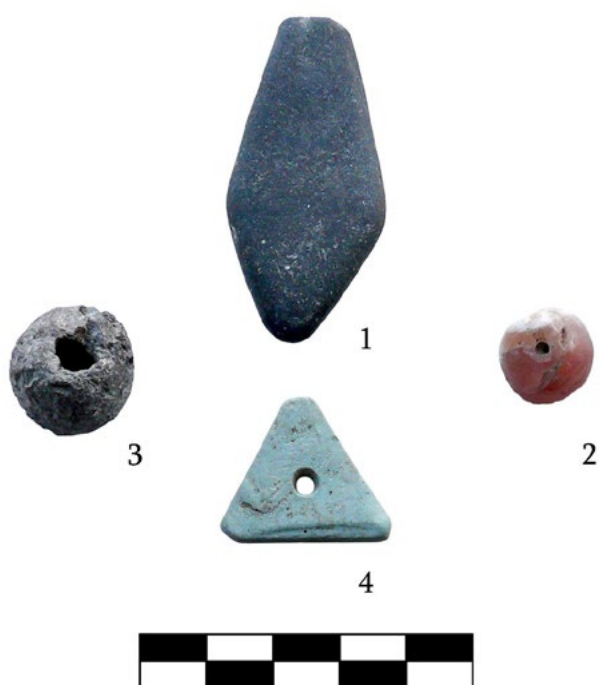


Plate 9



Plate 10

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‘Proto-Iliad’ in the Context of Indo-European Mythology¹

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Abstract: The consideration of mythological and historical data provides an opportunity to represent the predecessor of the ‘Iliad’ (‘Proto-Iliad’) as an epic transformation of the Indo-European serpent-slaying myth rhapsodizing the historical Trojan king Alaksandu.

Key words: Paris, Achilles, and the Indo-European serpent-slaying myth

In Vedic mythology, the thunder god Indra is the king of the devas (gods) while his arch-adversary the serpent Vṛtra is the leader of the Asuras, another class of deities opposed to the devas. The Asuras are composed of two family groups: the Dānavas, children of Dānu (a female demon), and the Daityas, children of Dānu’s sister Diti. Vṛtra is a Dānava (< **dānawo-*). In the ‘Iliad’, the opposing groups are the Trojans and the Greeks (Achaeans). The Greeks are frequently called Δαναοί ‘Danaans’ (< **danawo-*), which is apparently comparable with the Dānavas. Indra fights against the Dānavas, ravishes and weds the most voluptuous Indrāṇī / Śacī (a daughter of a Dānava), and kills the leader of the Dānavas Vṛtra, while the Trojan prince Paris fights against the Greek Danaans, ravishes and weds the most beautiful woman, the Greek Helen, and kills the greatest Greek hero, Achilles (Αχιλλεύς).

Indra performs many manly deeds and is called ‘manly’ and ‘most manly’ (e.g., *nare naryāya nṛtamāya nṛnām* ‘manly man, manliest of men,’ RV IV.25.4; *nṛtama* occurs elsewhere: I.29.1; III.30.22; IV.22.2; VI.18.7; VII.6.4; VIII.24.1; X.29.1, etc). These words are derived from Indo-European **h₂ner-* ‘virile strength; man.’² In one of the hymns of the Rigveda (I.174.1), he is invoked to protect the men (*rakṣā nṛn*). Paris’ second name is *Alexandros* (Ἀλέξανδρος) ‘Protector of men’ (Apoll. III.12.5), which etymologically coincides with *rakṣā nṛn* (in Indo-European context: **h₂lek-* & **h₂ner-*).

Vṛtra is called *ahi* ‘serpent, snake.’ This word is derived from one of the variants of the Indo-European stem for ‘snake, serpent’ **h₁e/og^wh-i-/* **h₂(e)ng^wh-i-* etc. Remarkably, V. N. Toporov (1986; 1990), considering the image of Achilles, concludes that it is derived from the mythological serpent, while his name represents a dialectal Greek or other ancient Balkanic reflex of one

of the variants of the Indo-European stem for ‘serpent, snake’ (cf. Gk. ἔχις, ὄφις).³

In this context Achilles’ epithet ῥηξῆνωρ ‘destroyer of men’, as a counterpart to Alexandros ‘protector of men’ is notable (Il. VII.228; XIII.324, etc). This makes possible the reconstruction of formula **h₂lek-* & **h₂ner-* : **h₁e/og^whi-/* **h₂(e)ng^whi-*.

Thus, the relationship of Paris-Alexandros : Achilles would correspond to that of Indra : Vṛtra. In the Indo-European context, the ‘Iliad’ represents an inverse version of the myth, where the hero of the goodies, Achilles, is derived from the serpent, while the baddy, Paris, is the epicized version of the serpent-slayer.⁴

Historization of myth

In the epics the myth is historicized – the divine serpent-slayer usually transforms into ‘our’ hero, leader or king of the goodies, while the serpent is represented as the leader of enemy tribes. Here I will consider an example from Armenian tradition. In the first part of the early Armenian epic ‘Vipasan’ the adversary of the Armenian King Tigran is the Median King Aždahak, husband of Tigran’s sister. He plots against Tigran, but is killed by him in battle (Khorenatsi I.24-31). Aždahak is the serpent Aži Dahaka of Iranian mythology (Khorenatsi states that Aždahak means *višap* ‘dragon’), so King Tigran takes over the role of

¹ This article is a continuation of my works on the myths of Indo-European **h₂ner(t)-* ‘manly’ gods/heroes and their adversary Danu tribe, see Petrosyan 2002: 99-106; 2007; 2008; 2010.

² Indra’s name, too, according to an opinion, is derived from **h₂ner-*, gen. **h₂nro-*, see e.g. Lincoln 1986: 97, 122, with bibliography. This etymology is regarded as improbable, see Mayrhofer 1992: 193.

³ For the derivation of Achilles from the mythic serpent considerable arguments are adduced: demonic character of Achilles: cruelty, rage etc; chthonic origins of his ancestors; correspondence of several episodes of his biography with the fragments of the serpent-slaying myth, etc. For the Indo-European roots for ‘snake, serpent’, see Pokorny 1959: 43-45; for Gk. ἔχις, ὄφις: Beekes 2010: 489, 1134-1135.

⁴ Those myths have parallels in other Indo-European traditions. The Scandinavian data are particularly notable: the community of Æsir gods is opposed to the Vanir gods with Njörðr at their head. Yngvi is the reincarnation of this god and known also as Yngvi-Freyr, son of Njörðr. The eponyms of Scandinavian ethnonym Dan are related to Yngvi-Freyr. Njörðr is derived from **h₂ner-t-*, Æsir etymologically correspond to Indian Asuras, and Danes are comparable with Danaans and Danaans (cf. also the consonance of Yngvi with the stem for ‘serpent’), see Petrosyan 2010: 127-128.

Indra	*h ₂ lek- & h ₂ ner-	Adversary of Dānavas	Abducts Indrānī / Śacī	Kills 'serpent' Vṛtra
Paris-Alexandros	*h ₂ lek- & h ₂ ner-	Adversary of Danaans	Abducts Helen	Kills 'serpent' Achilles

the Iranian hero Thraetaona/ Farudun, vanquisher of Aži Dahaka (in the reconstructed protomyth, the god needs help of the 'third' hero serpent-slayer – e.g., Ind. Trita, Iran. Thraetaona,⁵ – with whom 'our' hero could be identified). Tigran is the epic image of the Armenian King Tigran II the Great (95-55 BC), conqueror of Parthia, Greater Media and many other kingdoms, who was identified with Tigran the Ancient, namesake king of the 6th century BC.⁶ The names of protagonists, Tigran and Aždahak, are Iranian, the plot is based on an Iranian myth, but the epic is Armenian and the Iranians act as enemies. Aždahak is Median or 'Medo-Persian' (Khorenats I.29) whose descendants are called *višapazunk* 'dragonids'; moreover, Arm. *Mar* (< *Mada*) 'Median' is conflated with Pers. *mar* 'serpent, snake'.⁷ In the context of Armenian mythology, Tigran corresponds to the god dragon-slayer Vahagn, whose Iranian prototype Verethragna occurs as epithet of Thraetaona (Tigran himself was deified as Vahagn in his lifetime⁸; in Khorenatsi, Vahagn, strangely enough, is represented as Tigran's son).

Paris-Alexandros and Apollo

In the 'Iliad', Paris took the place of the mythological serpent-slayer. Which deity did he replace?

Apollo is the main defender of the Trojans and enemy of Achaeans. As Apollo Smintheus, he is the local god of Troy. Once he helped the Trojans to build the defensive wall of Troy and his arrows spread plague to the Achaean camp in the 'Iliad'. He is the most hated of the gods for Achilles (II. XXII. 15), who is killed by the arrow of Apollo (XXII. 359-360; the arrow from the bow of Paris was shot by the hand of Apollo, or he was killed by Apollo himself, or by Apollo, who took the shape of Paris, or by Paris, hidden behind the statue of Apollo). Thus, Apollo is the real killer of Achilles, as well as of his friend Patroclus and his son Neoptolemos.⁹ Apollo is a serpent-slayer, the killer of 'serpent' Python.¹⁰ It means Paris replaced Apollo. It may be said that Paris, to some extent, is the incarnation of Apollo with whom he shares many common characteristics: shepherd, archer, etc.¹¹ Paris' sister Cassandra who is also strongly

tied with Apollo (she received a gift of prophecy from Apollo but rejected his love and was punished by him), is also known as Alexandra. She does her best trying to save Troy with her prophecies, thus representing by herself the female hypostasis of Apollo, the god prophet, defender of Troy.¹² Apollo is known as the 'defender of people' since the 'Iliad' (II.20.79) and it can be said that on the divine level Apollo himself represented Alexandros, 'protector of men', counterpart of Indra, i.e., this name as well as the functions corresponding to it characterized right him.¹³

Paris-Alexandros and Apollo in Western Asia Minor

The names of Troy and Ilion (Τροία, Ἴλιον/ Ἴλιος) go back to the toponyms Taruisa and Wilusa of the Hittite sources. Paris-Alexandros has a historical prototype in the person of King Alaksandu of Wilusa (who sealed a treaty with the Hittite king Muwatalli II circa 1280 BC and thus lived for several decades before the date ascribed to the legendary Trojan War), while the ethnonym of the Achaeans is juxtaposed with the land of Ahhiya(wā) of the Hittite sources.¹⁴ In the treaty of Alaksandu and Muwatalli the gods of Troy-Wilusa are evoked: the first is the thunder/ storm god of army (ŠA^{URU} Wiluša^{dU} KARAŠ), the name of the second is erased and the third one is Apaliuna (KUB 21.1 iv 27-28¹⁵). Alaksandu and Apaliuna have no analogues in the onomastics of ancient Anatolia. They are obviously the cuneiform renderings of the Greek Alexandros and Apollo (Ἀπόλλων < *Apelyōn).

The main serpent-slayer in Indo-European mythology is the thunder god. In Greek tradition there is a myth about the combat between Zeus, the thunder god, and the monster Typhon (Τυφῶν, Τυφωεύς, Τυφώς, Τυφάων). The names Typhon and Python are poetic etymological

⁵ see Lincoln 1981: 103-122.

⁶ Abeghian 1966: 97-115.

⁷ Abeghian 1966: 134-135.

⁸ See Petrosyan 2008a: 175-176; Sarkisyan 1966, 14-17.

⁹ Losev 1957: 388-389.

¹⁰ Interestingly, this serpent also has a parallel in Indian mythology: Πύθων ὄφις etymologically corresponds to Ahi Budhnya 'Serpent of the Depths', see Toporov 2006; Watkins 1995: 460-463.

¹¹ Tsivian 1999: 272-275.

¹² The name of Alexandra is attested in the Mycenaean era as *a-re-ka-sa-da-ra* (My. V.659). It was used in a theonymic function in the Peloponnese, near old Achaean centers: there was a cult of Cassandra as the goddess Alexandra in the Laconian town of Amykles (Paus. III.19.6), the famous center of the cult of Apollo while Alexandros was the epithet of Hera under which she was worshiped at Sicyon. It is interesting that Alexandros gets out of Greek anthroponymy after the Trojan War for almost eight centuries, and gets back to it in the era of Macedonian flourishing (Alexander I, the king of Macedonia in 498-454 BC), while Cassandra occurs only in Macedonia. Thus, these names date back to the era of the Greco-Macedonian unity, see Gindin, Tsymbursky 1994: 29-30.

¹³ Notably, in the myth of killing of Cyclopes Apollo acts as a defender of people (unlike Zeus who acts as their adversary), see Losev 1957: 386; he kills Rhexenor 'destroyer of men' without any reason (Od. VII. 64-66), cf. the killing of Achilles (Rhexenor) by Paris-Alexandros.

¹⁴ See, e.g., Bryce 1999: 357-371; Latacz 2004: 73-100, 121-128.

¹⁵ See, e.g., Latacz 2004: 110.

doublets, dating back to the Indo-European times (**dhubh-* and **bhudh-*¹⁶). Their images are also very similar and should be derived from the same prototype, the slayer of which was Apollo¹⁷ (in archaic Greco-Egyptian myth Typhon is killed by Thoth-Apollo). In the cult of Apollo, the Syrian-Hittite is one of the main components (along with northwestern Greek Dorian and Cretan-Minoan¹⁸). A notable part of the elements of the Zeus and Typhon myth was borrowed from Hittite Anatolia.¹⁹ In the second half of the 2nd millennium BC, Wilusa was politically and culturally strongly tied with the sphere of Hittite-Luvian influence. That is why when studying the origins of the serpent-slaying myth in the 'Iliad', it is necessary to take into account the probability of existence if not of an Anatolian basis, then at least an Anatolian influence – the substrate, adstrate or superstrate in it.

In Anatolian mythology, the thunder (storm/ weather) god defeats the serpent Illuyanka.²⁰ The Hittite text is presented as a speech of a priest of the weather god of the city of Nerik, one of the most important Hattian sacral centers. The thunder god of Nerik, Taru, was the head of the early local Hattian pantheon whose homophony with Tarhu, Tarhunna, Tarhun(t/z)a, the Anatolian thunder god, seems not to be coincidental.²¹ Illuyanka is regarded as the same compound as Lat. *anguilla* and Gk. ἔχελυς 'eel,' but with the elements reversed, i.e., the second part of Illuyanka is derived from the mentioned Indo-European stem for 'snake' **h₂(e)ng^{wh}*.²² Zeus and Typhon are associated with this Anatolian myth, which had localizations in the East and West of Anatolia.²³ Anyhow, Paris' divine predecessor would eponymize Troy, while Proto-Achilles' was to be cognate to Illuyanka (note also that Taruisa/ Troy and Accilles are somewhat consonant with Taru/ Tarhu- and ἔχελυς/ *anguilla*, respectively, and might have been related with them in folk-etymological association). Thus, in the story of Paris and Achilles two versions of the serpent-slayer's myth (of Apollo and Taru/Tarhu-) could probably be conflated.

'Proto-Iliad'

With no claims to give comprehensive answers to all complicated questions, the prehistory of the 'Iliad' can be presented as follows. The 13th century Trojan King Alaksandu/ Alexandros or his namesake/ descendent in the poems/ songs praising him was juxtaposed with the god serpent-slayer Apaliuna/ Apollo, while

his adversary was identified as the serpent. Historical and mythological names have been intertwined: the ethnonym of the Achaeans was consonant with Achilles (the name of the serpent in one of the dialects of the region), while their second ethnonym coincided with the mythical Danavas.²⁴ All this is reminiscent of the situation in the 'Vipasank', where the historical Armenian king Tigran substitutes the mythical serpent-slayer, his adversary figures under the name of the serpent, the tribe of enemies is identified as 'Dragonids' and their ethnonym could have interpreted as 'serpent' in Persian. One important difference is that in the 'Vipasank', the god serpent-slayer presented as the son of the hero (which could only become possible in Christian times), while in the 'Iliad' the hero serpent-slayer figures as an 'executive assistant' of the god.

Troy was a ruined and deserted site when the immigrants from Hellas, the Aeolians and Ionians, settled in western Asia Minor after the Bronze Age. Apparently, it was then when the 'Iliad' began to take its final form.²⁵ The 'Proto-Iliad', an ode of praise for King Alaksandu, was radically changed among the descendants of the adversaries of the Trojans – Helladic Greeks. They changed the roles and images of the characters while at the same time saving the names: the hero serpent-slayer became weak and unworthy, and the Serpent became the greatest hero. Of course, many other elements that are not related to this 'Proto-Iliad' were included in the epic. Trojan tradition has been enriched with stories, legends and myths of Hellas and Asia Minor from different eras, including, apparently, the stories of real wars with Troy.

The stages for composing the 'Iliad' may be presented as follows:

1. The local version of the Indo-European serpent-slaying myth of the god Apaliuna / Apollo and the serpent (possibly, conflated with a similar Anatolian myth).

¹⁶ See Watkins 1995: 462.

¹⁷ Fontenrose 1959: 193.

¹⁸ See Burkert 1985: 144.

¹⁹ Watkins 1995: 448-459.

²⁰ Hoffner 1990: 11-12.

²¹ Schwemer 2008: 18-19.

²² Katz 1998: 320ff.

²³ Strabo XIII.4.6; 11; Watkins 1995: 450.

²⁴ For the Danaans in this context, see Gindin, Tsymbursky 1995, with literature. In the 'Avesta' the river Syr Darya is represented as Danu, and the Scythians of Syr Daria are called Danavas. The ethnonym of the Greek Danaans, as in the latter case, may be explained as if their ancestors lived along one of the rivers called by the stem **Danu*, at the junction of pro-Greek and pro-Indo-Iranian areas, from the Don to the Danube (see also Sakellariou 1986). Danaya was the denomination of the Mycenaean kingdom in Peloponnese, mentioned in an Egyptian inscription of the first half of the 14th century BC as *tnjw* (where Mycenae, Thebes, Nauplion, Messenia, Elis, Kythera and Amykles are also mentioned in their early forms), see Latacz 2004, 128-133, with literature. The transfer of mythological names to real objects and mythologizing real names are widely known ubiquitously, and the Greek Danaans certainly correspond with the Indian mythical Danavas. The Danu tribe is represented as mythical in the Indian and Celtic traditions, and as historical in Iranian (enemies), Greek and Scandinavian ('ours') traditions. Notably, the divine leader or ancestor of those tribes appears under a probable Semitic name that must have some explanation, see Petrosyan 2007; 2010.

²⁵ Bryce 1999: 370.

2. An ode of praise for King Alaksandu/ Alexandros (or maybe one of his namesakes/ descendents), who was juxtaposed with the god serpent-slayer, while his adversary was identified as the serpent ('Proto-Iliad').
3. The transition of this epic to the Greek newcomers from Hellas, who changed the roles of protagonists by 180°, making Achaeans the positive side of the conflict, and painting the Trojans as the negative.
4. The creation of the 'Iliad'.

The language of the 'Proto-Iliad'

The western region of Asia Minor since early antiquity was inhabited by many peoples – the Indo-European Luvians, Lycians, Karians, Lydians, Maionians, Mysians, probably also Thracians, Greeks, and the non-Indo-European Etruscans. Troy as a significant center of a multiethnic region would have been a multilingual city.²⁶ The question of the language spoken by native population of Troy still remains unclear despite the hypotheses brought forward.²⁷

Alaksandu is certainly a distorted cuneiform rendering of the Greek Alexandros, and this king of Troy, regardless of the ethnicity of the Trojans and the ethnic composition of Troy / Wilusa, was apparently wholly or partly of Greek origin.²⁸ The question of the origin of the name Apollo is more complicated. Among several etymological suggestions the Greek, Luvian and 'pre-Greek' ones have more turnover in contemporary science.²⁹ Following the logic of this article, it seems to be more economical to consider both Alaksandu and his god Apaliuna as having Greek (or close to Greek) origins.

²⁶ See, e.g., Bryce 2006: 117-122.

²⁷ See Watkins 1986; 1995: 144-151 and Starke 1997; Gindin, Tsimbursky 1996; Neumann 1999; Kloekhorst 2012, where the roles of the Luvian, Thracian, Mysian and Tyrsenian/ Etruscan languages are respectively highlighted, and Yakubovich 2010, 117-129, with a critical review and assertion of the lack of resolution to the problem.

²⁸ In the pre-Achaemenian Near East there were only local community cults. 'Confessional' names were not in use and the personal names usually had some specific well-wishing meaning in the persons' native language and in connection with their local cult, see Diakonoff 1984: 203, n. 135. From the Alaksandu treaty text it may be concluded that he took the throne 'according to his father's word', so probably not quite in accordance with the regular rules of succession. He might have been an adopted son or son of one of the concubines of his predecessor King Kukkunu, see Latacz 2004: 117-118. Notably, Paris-Alexandros was raised to adulthood by a shepherd and only then was recognized as the son of King Priam (cf. the similar legend about Cyrus, actual founder of the Achaemenid dynasty). The names of Priam and Paris are probably Luvian (Watkins), while the latter's second name, like the names of his brothers and sisters (Hector, Deiphobos, Cassandra, etc.), is Greek. May we conclude that it is an echo of a dynastic change? However, this doesn't provide much information about the language of the native Trojans, as the dynasties were often of foreign origin everywhere.

²⁹ For the Greek origin of the name, see Burkert 1975; 1985: 143-149; Nagy 1994; Kazansky 2005; Graf 2009: 90-113; for Luvian: Brown 2004; for non-Indo-European pre-Greek: Beekes 2004.

The well-known works on Apollo's name do not consider the image of god in the light of Indo-European mythology. In this context, Apollo is the closest match of the Indian god Rudra: both are archers, whose arrows spread diseases, and also healers, gods of poetry, related to mole and mouse, etc. (by the way, mice are associated with the Trojan Apollo Smintheus, whose non-Greek origin may easier be supposed).³⁰ There are other common characteristics of these gods: Apollo, like Rudra, is the god of Männerbund, divine leader of the community of young unmarried hunter-warriors (Greek **apelyā*, according to Burkert³¹); Apollo brings death to the camp of Danaans, while Rudra destroys the army of Danavas all alone (Mahabharata XII. 166); even the gods are afraid of Apollo, as well as of Rudra.³²

Thus, the image of Apollo, as well as the theme 'Apollo and Danaans', has Greco-Indo-Iranian roots (those languages constituted one group after the fragmentation of Proto-Indo-European), which makes the non-Greek etymologies improbable. And moreover, if Apollo was not a Greek god, then how did he absorb the meaning of an alien Greek name of Alaksandu/ Alexandros and made it his motto, his action plan when he was defending the Trojans (the subjects of Alaksandu), killing Rhexenor 'destroyer of men' and making Alexandra/ Cassandra a goddess of his circle? The Greek Alaksandu/ Alexandros, 'protector of men', is more likely to have Apollo as a Greek god, in a certain sense the eponym of his name, as his patron.³³

Thus, the 'Proto-Iliad' is based on a Greek myth; the names of its protagonists –Alexandros (Alaksandu), Apollo (Apaliuna) and, probably, 'Proto-Achilles' ('serpent') – are of Greek (or close to Greek, dialectal) origin. Accordingly, the 'Proto-Iliad', probably, was originally composed in Greek, by the tribe-members of Alaksandu in Wilusa.³⁴ However, I cannot rule out that it was retold in other languages as well (let us recall the Nart epic of the Caucasus and the 'Köroğlu', which are famous among many and even unrelated peoples).

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³⁰ Gregoire *et al.* 1949: 127 seq., 148; Toporov 1977; Puhvel 1987: 134-135.

³¹ For Apollo and Rudra in this context, see Kershaw 2001, 187-190; 210 ff. *et passim*.

³² Kershaw 2001: 211.

³³ Petrosyan 2015.

³⁴ The Armenian 'Vipasank', as noted, is based on an Iranian myth. Armenia was part of the Achaemenian Empire for centuries and the Armenian religion, mythology and culture were strongly Iranianized. Obviously, Troy was not under such a strong age-long Greek influence in the 2nd millennium BC, and local non-Greeks would hardly epicize the victory of their king over the Greeks on the base of a Greek myth.

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The Sale and Lease of Vineyards in Media Atropatene

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Abstract: This study is a re-analysis of three texts, two in Greek and one in Parthian, found near Avroman in Iranian Kurdistan c. 1909. Particular emphasis is placed on what these texts reveal about legal praxis in the region in the 1st centuries BC/AD. The relevance of these sources for our understanding of early viticulture is also discussed. Finally, the Avroman documents are investigated in relation to the Hellenism of Media Atropatene and the role of Media Atropatene in the relationship between Armenia and the Iranian world is explored.

Keywords: Avroman, Media Atropatene, Tigranes, Automa, Seleucids, viticulture

Introduction

Gregory Areshian's involvement with the exciting oenological discoveries at Areni-1¹ encourages me to think that he may find these remarks on viticulture in nearby Media Atropatene, at least in some of its dimensions, of interest. Although chronologically later than the work for which he is best known, the material discussed below nevertheless illuminates an otherwise obscure domain of ancient economic and legal life in the western Zagros. While it is true that a century has passed since their original publication, the texts selected here merit re-examination. Often cited *en passant*, many of their implications are frequently overlooked, yet scholars working in northwestern Iran and the southern Caucasus may be surprised at what these documents reveal about life in Media Atropatene under the Arsacids.

The Avroman texts

The three surviving documents, said to have been found in a 'hermetically sealed' stone vessel discovered in a cave in the Kuh-e Salan, near Avroman² (Iranian Kurdistan), around 1909, have been known to the scholarly world since their original publication six years later.³ Brought to England in 1913 by Dr. Sa'id-khān Kordestānī,⁴ the documents were auctioned by Sotheby's, eventually finding their way into the British Museum.

Although usually described as 'parchment', all three are made of leather.⁵ Minns labelled the texts I-III. The first two were written in Greek, while the third, and least

well-preserved, was written in Parthian.⁶ The Greek texts are written on a rectangular surface measuring 14 × 24cm. (I) and 21 × 27cm. (II), respectively, while the Parthian text, which suffered more damage, measures 14 × 9.5cm. (III). It has an endorsement or notation on the *verso* in Parthian. The Greek documents bear the same text written twice (referred to as IA, IB, IIA, IIB) with some slight variations in toponyms and wording (see below). I is dated to 225 (presumably in the Seleucid era), month *Apellaeus*, i.e. 88 BC, in the reign of 'the king of kings Arsaces, the Benefactor, the Just, the Manifest and the Philhellene, and of the queens, Siakē his sister, of the same father and wife; and Aryazatē called Automa, daughter of the Great King Tigranes and his wife as well as Azatē his sister, of the same father, and wife.'⁷ II is dated to 291, i.e. 22/1 BC, if converted from the Seleucid era, in the reign of 'the king of kings Arsaces, the Benefactor, the Just, the Manifest, and the Philhellene, and of the queens, Olennieire, Cleopatra, Baseirta, Bistheibanaps.'⁸ III, on the other hand, is dated to 'year 300, month *Arwatāt*', and omits any reference to a ruling monarch. As Henning noted many years ago, the use of the Iranian month name is a good indication that this text was dated according to the Arsacid, rather than the Seleucid era, and was thus written between 7 January and 5 February, AD 53.⁹ Therefore, this small 'archive', reputedly just part of a larger group consigned for safekeeping to the jar in which it was found,¹⁰ spans a period of 141 years, from 88 BC to AD 53.

⁶ Despite the long-running controversy over the language of the third text, Haruta 1992: 29-31 showed conclusively that it is indeed Parthian (in which Cowley 1919 and Nyberg 1929 were correct, though when they wrote the language was called 'Pahlavi').

⁷ Trans. Shayegan 2011: 208.

⁸ Minns 1915: 32.

⁹ Henning 1958: 29, 'Das uns interessierende Dokument ist ŠNT 300 YRH' rwt 'Jahr 300, Monat (H)arwatāt' datiert, wobei man zunächst meistens an die Seleukidenära gedacht hat; doch hat die seither bekanntgewordene Inschrift des Artaban gelehrt, dass der Gebrauch iranischer Monatsnamen mit dem der übrigen von M. Rostovtzeff hier seit langem vorgezogenen parthischen Ära Hand in Hand geht... danach wäre das Dokument zwischen 7. Januar und 5. Februar 53 n. Chr. geschrieben worden, sodass die Zeitabstände zwischen den drei Urkunden ungefähr gleich lang wären'.

¹⁰ Minns 1915: 22 wrote that the jar contained 'several documents.

¹ Barnard *et al.* 2011.

² The orthography of the name varies greatly, viz. Avrāmān, (H) awrāmān, Hewrāmān, Owramān; conventionally without diacritics Avroman/Awroman.

³ Minns 1915.

⁴ Minns 1915: 22 called him 'Mirza Sa'id Khān, an English-trained doctor', but Minorsky 1943: 96, who knew him well, called him by his correct name.

⁵ Jördens *et al.* 2015: 329.

All three texts concern the sale or lease of vineyards. They may be paraphrased¹¹ as follows:

I – (date formula) the transaction took place in the hyparchy of Baseira (Βαίσειρα), near Baithabarta (Βαιθάβαρτα), village of Copanis (Κώπανις); two brothers, Baraces (Βαράκης) and Sobenes (Σοβήνης), sons of Maiphorres (Μαιφόρης), received from Gathaces (Γαθάκης), son of Oipates (Οίπάτης), 30/40 drachmas as the sale price of an orchard (including water and vines) called Dadbakanras (Δαδβακανράς)/Ganzace (Γανζακή), as well as access thereto, in Copanis; sold on condition that Gathaces should retain the orchard in perpetuity and that he and his descendants should perform what was written in an older (prior) agreement; neither Baraces, his brother/descendants or anyone else was to dispossess Gathaces; should anyone succeed in doing so, they were to pay double the sale price, plus a fine of 200 drachmas, and the same sum to the King's treasury, and the same shall fall due if Gathaces neglects the vineyard or fails to keep it in good condition; irrigation water was granted, one day in every eight;¹² names of witnesses; in addition to sale price, Gathaces to give Baraces 1 drachma, 35 (?) of meat, 50 units of bread, 8 oxen, 2 *cotylae* of wine; Baraces to give Gathaces the must and drainings of pressed grapes from the wine-press (presumably still in the press at the time of sale).

II – (date formula) the transaction took place in the hyparchy of Basiraora (Βασιρύορα; cf. Baseira above)/village of Cophanis (Κώφανις; cf. Copanis above), near the post-station (*stathmos*)¹³ Desacdis (Δησακδής)/Desacidida (Δησακιδίδοις); Aspomaces (Ἀσπωμάκης), son of Gaaces (Γαάκης), received 55 drachmas from Denes (Δήνης), son of Gathaces (Γαθάκης), for the leasehold of a vineyard 'in the open country' called Dadbakabag (Δαδβακανβάγ), including access and water rights in common with co-possessors; in return Denes to pay yearly 1 drachma, 2 *cotylae* of wine, 21 units of bread, 5 oxen; Denes promises never to revoke the lease; anyone seeking to break the lease is to pay 200 drachmas and the same amount to the King's treasury; names of witnesses.

III – following the date formula – Pātspar (*ptspr*), son of Tīrēn (*tyryn*) of Bōd (*bwdy*), sold a half-share of the vineyard called Asmak (*smk*)/Asmakan (*smkn*),¹⁴ within the ploughland, to Awīl (*wyl*), son of Bašnēn (*bšnyn*), for 65 drachmas; sold as 'equals/partners/co-owners' (?); sworn before six witnesses.

Between the names invoked in the date formulae, those of the principals, and those of the witnesses, the Greek texts contain no fewer than thirty-six anthroponyms and the Parthian text another thirteen. Recognized already by Minns as, in the main, 'clearly Iranian', these names have not surprisingly been discussed by many scholars over the years.¹⁵ To the anthroponyms may be added nine toponyms. If MacKenzie was correct in suggesting that Δαδβακανράς (Dadbakanras) (I) and Δαδβακανβάγ (Dadbakabag) (II) render an Iranian Dādbakān,¹⁶ then both documents would seem to refer to the same vineyard. Minns suggested that only Sobenes sold his share of the vineyard to Gathaces in I, his brother Baraces having retained his share.¹⁷ If so, and if the purchaser in II, Denes, son of Gathaces, is the son of the same Gathaces mentioned in I, then it may be that Denes' lease was meant to consolidate his holdings, acquiring rights over, if not absolute possession of, part of the orchard purchased decades earlier by his father.

As for the toponyms, beyond C. J. Edmonds' observation that, 'Neither my own lists of the villages of the Avroman tribal area nor the latest surveys (1942) show any names resembling those of the parchments', one can only fall back on his comment that, 'The present name of the *darband* [a narrow pass] by which the Taināl breaks through the Qara Dāgh, and of the river itself before it takes a new name from Ṭāūq (Dāqūq),

These passed from hand to hand and some were lost, only three have survived'.

¹¹ Paraphrases based on Minns 1915 and Haruta 2001. The duplicate texts diverge in some cases. Where names are concerned I have given both, separated by /.

¹² At Julfa, in the mid-19th century, vine cuttings were 'well watered every ten days'. See Binning 1857: 87. Around Qazvin, on the Iranian plateau, by contrast, 'The vine-dressers water their vines once in the year, which is twenty days after the festival of the Nao-Roz, about the 10th of April; and the...soil is, which is clayey, is so good that the moisture it then imbibes suffices until the next irrigation'. See MacGregor 1871: 229.

¹³ For Altaweel *et al.* 2012: 15, 'The mention of the post stations (*stathmos*) Baithabarta and Dasakdis stresses the continuing importance of the region in the overland route system.'

¹⁴ Gignoux 2008: 133 said this text concerned 'half of a vine called Asmak'. A misprint for 'vineyard', or a particularly valuable winestock?

¹⁵ To cite just a few treatments of names mentioned in the Avroman documents, see e.g. Bailey 1931: 592 on Aramasdes/Αραμασδης (IIA/B 16), 'probably the North-Western form'; Bivar 1970: 65 on Tīrēn (III 1), 'like the god Tīr', also attested on a Parthian ostrakon from Shahr-e Qumis/Hekatompylos; Schmitt 1975: 18 and n. 22 on Μιραβανδακης = *Mihravandak (IIA 12, IIB 17).

¹⁶ MacKenzie 1987. Cf. Schmid 1976 with further arguments (discussed below under *Viticulture*).

¹⁷ Minns 1915: 52. Cf. Mitteis 1915: 427-8, 'Als Verkäufer werden zwei genannt, die beiden Söhne des Maiphorros: Barakes und Sobenes; während das Kaufobject nur eines ist...und sodann soll von diesem der Käufer Gathakes nur die Hälfte haben, die andere Hälfte bleibt aber nicht beiden Verkäufern, sondern nur dem Barakes. Demnach ist in Wahrheit trotz dem ungeschickten Ausdruck nur die Hälfte des Grundstücks verkauft und zwar, wenn beide Söhne des Maiphorros Miteigentümer des Ganzen gewesen waren, die des Sobenes. Daß danaben Barakes noch als Mitverkäufer mitfiguriert, ließe sich, wenn es überhaupt einen Sinn haben soll und nicht auf die bloße Ungeschicklichkeit der Redaktion zurückzuführen ist, so erklären, das er als Miterbe seines Vaters (oder kraft allgemeiner Bestimmung des Rechts an solchen κληροι) beim Verkauf ein Näherrecht besaß oder daß die Parzelle bisher noch ungeteiltes Miteigentum beider Brüder war und in einem Gesamthandsrecht stand; dann würde erst durch den Verkauf die Teilung herbeigeführt'. For a similar explanation see Meyer 1920: 121.

is Bāsira [cf. Baiseira/Baseirta/Basiraora]. The name of the wooded upland within the double part of the Qara Dāgh is Kōpi [cf. Copanis/Cophanis]. Neither of these names, as far as I know, has any meaning in modern Kurdish'.¹⁸ By contrast, Unvala suggested that the place of discovery bore no necessary relation to the location of the orchards mentioned in the transactions,¹⁹ but his views do not appear to be shared by anyone else.

Legal praxis in Media Atropatene

Although Avroman I had been unrolled by the time Minns saw it, II had not. He described it as follows: 'the lower half unrolled, the upper undone on the left side, but still tightly rolled up and held by string on the right side. The string could not be removed without cutting it or breaking two mud seals, of which one had lost all its surface; upon the other, though it was much disintegrated, there could still be distinguished a device something like an E with a border of lines.'²⁰ In fact, as noted above, the sale and lease records from Avroman were written out twice on each 'sheet' of leather. All of the early commentators on the Greek documents from Avroman were struck by the fact that, in its intact state, II exhibited an uncanny similarity to the 'Doppelurkunden' or double documents in which a legal instrument was written out in duplicate on a single sheet (in this case of leather) in Ptolemaic Egypt on papyrus.²¹ The inner or closed copy (*scriptura interior*) was written on the top half of the sheet, rolled up, tied and sealed to prevent tampering with its contents, while the outer or open copy (*scriptura exterior*) was written on the lower portion of the sheet (with a gap of 2-3cm. in between the two versions) and left visible so that it could be consulted as the need arose.²² Deissmann was particularly struck by the parallel presented by Jeremiah 32: 11, where a double document is clearly described – 'evidence of the purchase, both that which was sealed according to the law and custom, and that which was open' – that was written in Judah c. 600 BC and of which God said, 'Take this evidence of the purchase, both which is sealed, and this evidence which

is open; and put them in an earthen vessel, that they may continue many days' (Jeremiah 32: 14).²³

Some scholars have cited the Avroman documents, along with registration texts from Old Nisa²⁴ and the Sasanian *Mādayān ī Hazār Dādestān*, as important sources for the reconstruction of early Iranian contract praxis.²⁵ Minns already pointed to a forerunner of the double document in the Assyro-Babylonian practice of writing a condensed version of a legal text on the clay envelope surrounding it, which was then sealed by witnesses. In discussing the double documents of Ptolemaic Egypt and the Judaeen desert, scholars have speculated on the origin of the tradition, pointing vaguely to an early 'Semitic' origin.²⁶ More pointedly, however, Lipiński argued that, 'The double document is of clear cuneiform provenience and its use in Westsemitic legal praxis must date, at the latest, from the Neo-Assyrian period, since it was only the Neo-Assyrian scribes who still continued the ancient praxis of writing the deed a second time on the outer clay envelop (sic)'.²⁷ Given the strong Assyrian influence in the western Zagros, and indeed the evidence for the use of Aramaic there,²⁸ it is perhaps not to the Hellenized east that we should look for the origins of this practice in Media Atropatene, but to centuries of exposure to Assyrian legal praxis. Contrary to what some scholars have written, the persistence of a tried and true practice designed to prevent tampering with a legal instrument is no more surprising to find in the 1st centuries BC and AD than is the continued use of seals that are not meant to be broken in the 21st century AD.²⁹ Vineyards in Iran have probably always been valuable property, and instances of litigation involving them are well-documented.³⁰

²³ Deissmann 1922a: 510ff.; 1922b: 33-5.

²⁴ For vineyards in the Nisa documents, see the discussion in Bielmeier 2008: 296-7. There the Parthian term *uzbar(i)*, written 'wzbyr, means 'subject to taxation, profitable (a category of vineyard)' and over 80% of the roughly 2700 Nisa ostraca record quantities of wine registered from over a dozen estates.

²⁵ E.g. Choksy 1988: 194ff.

²⁶ Thus Koffmahn 1968: 20ff. Cf. Bagnall 2011: 109 who cites those ancient law specialists who 'have generally concluded that it is a feature of a common Hellenistic documentation style from an early period'.

²⁷ Lipiński 2000: 574.

²⁸ The literature on this topic is vast but see e.g. Fales 2003, particularly with reference to the Aramaic of the Bukān stele from Iranian Azerbaijan, and Altaweel *et al.* 2012.

²⁹ Thus I cannot agree with Jördens *et al.* 2015: 329 when they write of the Avroman documents, 'Als verschnürte und mit Tonsiegeln gesicherte Sechszugendoppelurkunde besaßen sie ein im gesamten Vorderen Orient verbreitetes Format, das in stärker urbanisierten Gegenden, wo man über andere Sicherungssysteme verfügte, zu dieser Zeit längst außer Gebrauch gekommen war'.

³⁰ To cite just one example from the area of Urmia dating to the early 20th century, which, like the Avroman text I, involves the sale of a half share of a vineyard: 'A woman buys a vineyard in the name of her cousin for 480 *tomans*. She sells one-half of it shortly for 240 *tomans*, and gives a deed in her own name. The value of the vineyard soon increases greatly, and in order to repossess her vineyard she enters suit to recover it again, on the ground that she had no right to sell the property in her name which belonged to her cousin. Already the two parties to this litigation have paid to the courts 500 *tomans*, and the

¹⁸ Edmonds 1952: 480. Herzfeld 1932: 51, n. 1, noted, 'Baisaira oder Basiraora, deren ersten Namensteil aram., deren zweiter iran. aussieht, schloß sicher šahrzūr ein wenn es das nicht einfach war. Die Provinz, in der man i. J. 87/6 v. Chr. nach Arsakes Dikaos datierte gehört zu Atropatene, das mit dieser Landschaft an 'Irāq grenzte'. It goes without saying that Herzfeld's analysis is to be taken with reserve.

¹⁹ Unvala 1920: 128, the circumstances of their discovery, he argued, 'does not in any way force us to find them [the toponyms mentioned] in the neighbourhood of Avroman...They could very probably have been brought there from the original place, where they were written...attempts at the location of these places near Avroman, in Kurdistan, are fruitless.'

²⁰ Minns 1915: 23-24.

²¹ Thus Mitteis 1915: 426 'er zeigt so weitgehende Übereinstimmungen mit dem der ptolemäischen Urkunden aus Ägypten, daß man dies als einen neuen überraschenden Beweis für die Einheit des Rechts- und Urkundenwesens im hellenistischen Gebiet bezeichnen muß'.

²² Koffmahn 1968: 10ff.

Viticulture

Avroman lies to the south of the postulated distribution area of the wild grape (*Vitis vinifera* var. *sylvestris*).³¹ The evidence of tartaric acid residues, indicative of a grape-derived substance (juice, wine, molasses) on ceramics from Hajji Firuz (6th millennium BC), near Lake Urmia, and Godin Tepe (late 4th millennium BC), near Kangavar, could, in theory, be explained via trade, rather than grape cultivation, but the presence of *Vitis* pollen at Lake Zeribar c. 4300 BC argues for the spread of the vine itself, and not merely its by-products.³² *Vitis*, however, 'is an extremely under-represented taxon in pollen rain and even at its lowest values could show the presence of a close vineyard,' thus the small peak in *Vitis* values seen in the pollen core from Lake Almalou, located to the southeast of Tabriz, at c. 3000 cal BP, may be an indication of 'a possible development in viticulture at a regional scale.'³³ In his analysis of the toponym Δαδβακανράς (Dadbakanras), Schmid recognized that the last syllable of the name, -ράς, was cognate with New Persian *raz*, 'wine, vineyard', and Pahlavi *raz*, 'vine, vineyard', and could even be seen in an Old Persian loanword in Achaemenid Elamite, **ra-za-ka-ra*, 'vinedresser, vigneron'³⁴ and the personal name *Raziya*.³⁵ The variant, Δαδβακανβάγ (Dadbakabag), ending in -βάγ, was cognate with New Persian and Pahlavi *bāγ*, 'garden' (cf. Sogdian β'γ). Thus, the two variants of the name signify the vineyard or garden of Dadbakan.

Prior to the 20th century, what is today northwestern Iran had a robust tradition of both viticulture and oenology.³⁶ In 1843 the American missionary Rev. Justin Perkins, stationed at Urmia, wrote, '*the wine of the country...is almost as plentiful and cheap as the springs of water.*'³⁷ He gave a vivid description of viticulture in the area: '*The vine is set out in rows. The space - about fifteen feet wide - between the rows, is sown two years with cotton. The third year - that in which it begins to bear - the soil is thrown up into ridges about three and a half feet high. The vines stand usually in the north side of the ridge, that they may be partially shielded from the concentrated heat of the sun. They run over, and the clusters lie on the top and the opposite side. Near the high mud-walls, by which many of the*

*vineyards are enclosed*³⁸, *for the security of the fruit, the vines often run up and over the wall...The growth of each year is cut off, early in the ensuing spring, very near the point where it sprang from the permanent stock. Vinedressers tell us, that the twentieth of an inch being left by the pruner, will ensure a future crop. It is thus pruned,*³⁹ *'that it may bring forth more fruit.'* *Grapes are eaten fresh in their season. They are also braided by their stems, and suspended from the ceilings of dry rooms, and kept fresh during the winter. They are dried, as raisins, for sale and exportation, as well as for domestic use. Vast quantities are also made into molasses. And still more - generally of the inferior grapes and the gleanings - are also made into wine and arrák.*⁴⁰

Seventy years later, it seems, more of the grape production of the region was destined for the production of raisins. Adams described the process as follows: '*Large vineyards employ thousands of people, and the grapes are probably among the best in the world and of endless variety....Two kinds of raisins are made from the grapes: the kishmish and the sabja. A plastered or cemented surface on the slope of a hill is covered with grapes, which are then converted into raisins by rays of the sun. These raisins are called kishmish. Water, turned into lye by the addition of ashes from a thornbush or burnt vines, is boiled and grapes dipped into it. After this they are spread out upon the ground to dry for a week. The very choicest raisins are made from seedless grapes.*'⁴¹ According to Shedd, '*The vineyards, which make up a large part of the wealth of the Christians, and contribute largely to its increase, are held by a tenure much more favourable to the cultivator. The raisins, which are the most valuable product of the vineyards, are exported to Russia, and, in lesser quantities, to western Europe, via Trebizond.*'⁴² Certainly when C. J. Edmonds worked in the area, he found a plethora of grape varieties being grown in the area. '*Vines are cultivated extensively in the Qara Dāgh as in the other hill districts of Kurdistan*', he wrote, '*and I have in my diary a list of twenty varieties, eleven white and nine black, 'purple,' or 'red,' given to me by the headman of Jāfarān, the village at the north-eastern foot of the Sāgirma pass, where more than once I spent a night.*'⁴³

case is not yet settled'. See Speer 1911: 305-6.

³¹ Miller 2008: 937-8.

³² See the excellent survey of the evidence in Tengberg 2012: 184-9.

³³ Djamali et al. 2009: 1371.

³⁴ Schmid 1976: 45. For *razakara* in the Persepolis treasury texts see Cameron 1948: 165, where the word was initially read as *iš-ra-ša* and interpreted as 'armorer'; 1958: 167-8, 1965: 179-80. The recognition of the connection between El. *razakara* and the Iranian terms was first made by Gershevitch 1951: 137. Cf. Benveniste 1958: 58; Hinz 1961: 245.

³⁵ Mayrhofer 1973: 226, s.v. 8.143 **Ra-zi-ya**.

³⁶ For a survey of viticulture in 19th century Iran, see Floor 2003: 320-32.

³⁷ Perkins 1843: 225.

³⁸ Thus Smith 1833: 254, 'Vineyards were numerous in every part [on the Urmia plain] and like the gardens were invariably enclosed by a wall,' or Nweeya 1913: 151, 'Around all orchards or vineyards are earth walls fifteen feet high, so no one can enter.'

³⁹ For prunings sold as fuel in Azerbaijan see Laurie 1865: 285. According to Tavernier 1678: 144, the vines in the colder latitudes were buried during the winter. He wrote, '*Armenia, Mengrelia, Georgia, and Media abound in Vineyards. They bury their Vines all the Winter, and take them up again in the Spring by reason of the cold. In the hotter Countries they dress their Vines as we do, without any underpropping them.*'

⁴⁰ Perkins 1843: 427-8. For grapes 'hung in dry storerooms in autumn for winter use', also in Azerbaijan, see also Jewett 1909: 39.

⁴¹ Adams 1898: 90.

⁴² Shedd 1903: 4.

⁴³ Edmonds 1952: 481. By contrast, other authorities listed even more. According to Adams 1906: 131, in the western provinces of Persia, about forty different kinds of the best grapes grow'. Even in the more arid region of Baluchistan, eighteen varieties were recorded in Mustafa and Ginai 1941: 4.

Hellenism in Media Atropatene and the Armenian connection

In broad terms, the history of Media Atropatene is well-known.⁴⁴ Atropates, an Iranian who had served as satrap of Media under Darius III, was re-appointed to this post by Alexander, replacing Oxydates whom the Macedonian conqueror had installed following Atropates' flight to Hyrcania with Darius.⁴⁵ Atropates' daughter married Perdiccas at Susa⁴⁶ and, after the death of Alexander, Atropates gained independence, becoming ruler of Lesser Media in 323 BC.⁴⁷

In Alfred von Gutschmid's opinion, Media Atropatene was thus the first new 'state' to arise from the ashes of Alexander's vast if ephemeral empire and the first 'symptom' of an Iranian reaction against Hellenism.⁴⁸ In holding this view, however, he was, for many years, in the minority. Soon after their initial publication, for example, the Greek documents from Avroman were taken as a clear sign of Hellenism in the region.⁴⁹ More recently, they have been interpreted as 'Another confirmation for Greek being an official language in the Arsacid state' since 'Legal documents were written in it'⁵⁰, which 'highlight the lasting impact of Hellenistic governmental practice in the region and draw attention to the likely presence of Greek cities (*poleis*).'⁵¹ The institutions of *hyparchy*⁵² and *klēroi*,⁵³ attested in the Greek Avroman texts, have also been seen as signs of Hellenistic influence. A far more critical examination of the sources, however, has suggested that, at most, Hellenization was only ever very superficial, even in the core areas of ancient Iran.⁵⁴

Given that Greek was the language used in the 1st century BC for the older two legal instruments from Avroman, the question arises, who actually wrote these texts? Many years ago Tarn observed, 'in no. I (in Greek) two men whose names in Pahlavi [Parthian] (and doubtless in real life) would be Gathak and Barak appear as Γαθάκης and Βαράκης, while in the Pahlavi [Parthian] document no. III we have Sinak instead of Sinakes.' The more formal spelling in Avroman I and II, he suggested, reflects 'the kind of Greek which obtained in the Parthian empire when legal or formal documents' were drafted. This required 'a professional scribe' and in his opinion was a clear indication that the Greek texts from Avroman were written by a scribe, whereas the Parthian one wasn't.⁵⁵ Whether or not Tarn was correct, the fact that Greek was used for formal, legal purposes in Media Atropatene during the 1st century BC should come as no surprise. Greek was, after all, used at Susa, at roughly the same time, as two poems in elegiac Greek, engraved by the citizens of Susa in honor of their Arsacid-appointed governor Zamaspes, and a letter from Ardawān (Artabanus) II to the city, renamed 'Phraata of Susa', clearly attest.⁵⁶

Finally, with respect to Armenian history, Avroman I is of particular interest because of the reference made to 'Aryazatē called Automa, daughter of the Great King Tigranes and his wife.' Recently, Rahim Shayegan has shown that the Arsaces mentioned (i.e. the husband of Aryazatē) in the opening of the document, by whom the text is dated, can only be Gōdarz (Gotarzes) I, who succeeded his father, Mihrdād (Mithridates) II,⁵⁷ in 91 BC, according to the Babylonian astronomical diaries.⁵⁸ This is particularly interesting in light of the testimony of Cassius Dio, according to whom a daughter of Tigranes of Armenia was married to a Mithridates of Media⁵⁹, and Strabo, who noted that Atropates and his successors maintained their independence, at least in part, through judicious marriage alliances with the royal families of Syria, i.e. the Seleucids⁶⁰, Parthia and Armenia.⁶¹ Further, Shayegan speculated that the

⁴⁴ Schottky 1989.

⁴⁵ Quintus Curtius 6.2.11; Arrian 3.20.3.

⁴⁶ Arrian 7.4.5; Justin 4.13.

⁴⁷ Diodorus Siculus 18.3.3. Shayegan 2012: 103. See the recent discussion in Olbrycht 2013: 161. Cf. Schottky 1989.

⁴⁸ von Gutschmid 1888: 20-1, hat es auch nie eine hervorragende Bedeutung zu erlangen vermocht, so verdient es doch als erste einheimische Neubildung auf dem Boden der Alexandermonarchie und als erstes Symptom einer iranischen Reaktion gegen den Hellenismus Beachtung'.

⁴⁹ Thus San Nicoló 1929: 24, n. 1, 'ein vereinzelt Zeugnis des Hellenismus aus dem zum Partherreich gehörenden ehemaligen assyrischen Gebiete'.

⁵⁰ Dąbrowa 2010: 585.

⁵¹ Altaweel et al. 2012: 15.

⁵² Thus Bengtson 1964: 23, 'so erscheinen solche, [hyparchies] allerdings erst in parthischer Zeit, sowohl in Media Atropatene wie in Mesopotamien; auch hier handelt es sich sicher nicht um eine Neuschöpfung der Parther, sondern um eine Übernahme früherer Verwaltungsformen....so gehen auch diese Hyparchien auf eine... Verwaltungsform....die nur diejenige Alexanders gewesen sein kann'.

⁵³ Kosmin 2013: 679, 681.

⁵⁴ Huyse 1996: 73, 'so gewinnt man doch insgesamt den Eindruck, daß zumindest in den Kernländern Irans zu keinem Zeitpunkt der vorislamischen iranischen Geschichte eine mehr als oberflächliche Hellenisierung stattgefunden hat, nicht einmal zur Zeit der Parther, in der wohl manches anders beurteilt werden muß, als bisher geschehen'.

⁵⁵ Tarn 1929: 53.

⁵⁶ For recent discussion see e.g. Rougemont 2012: 14-15; Potts 2016: 392-4.

⁵⁷ Some scholars still attribute I to the reign of Mithridates II, e.g. Wiesehöfer 2015: 335.

⁵⁸ Shayegan 2011: 208ff., 240. Cf. Assar 2009: 198. The Babylonian sources from the period 91-87 B.C. refer to Godarz by name, along with his queen, Ašiabatar. It is also interesting to note that, from the time he was Crown Prince, Tigranes was mentioned in the Babylonian astronomical diaries. See Geller and Traina 2013.

⁵⁹ Cassius Dio 36.14. Cf. the discussion in Adontz 1970: 500, n. 4; Coloru 2014: 396.

⁶⁰ Late in his reign Antiochus IV may have arranged a marriage between one of his daughters and the son of the king of Media Atropatene, if O. Coloru is correct in his admittedly speculative reconstruction of events. See Coloru 2014: 407. Martinez-Sève 2014: 392, called it 'une alliance militaire concrétisée par le mariage d'une princesse séleucide'.

⁶¹ Geog. 11.13.1-2. Cf. Marquart 1895: 641. Coloru 2014: 396, 413, however, argued that this referred to an Arsacid, the future Mithridates III, who was installed as king of Media Atropatene and

titulature employed 'may have been geared toward the Greek element, which historically had settled in the cities of the region', citing Polybius (10.27.3) on the Greek colonies founded in Media by Alexander.⁶² Equally, however, one may ask whether the reference to Aryazate's father, 'Great King Tigranes', was not geared towards the inhabitants of a region with which the royal house of Armenia was closely allied by marriage? Indeed, Josef Marquart suggested that the Iranian dialect of Media Atropatene was the source from which Iranian loanwords entered the Armenian language during the 2nd and 1st centuries BC.⁶³ All of this suggests that Media Atropatene and Armenia clearly shared far more than just a love of wine during the 1st century BC/AD.

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reigned there as Mithridates I of Media Atropatene c. 100–66 B.C. This would necessarily make him the king by whom Avroman I was dated, but this is entirely at odds with the evidence marshalled by Shayeagan.

⁶² Shayeagan 2011: 209 and n. 689.

⁶³ Marquart 1911: 295.

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Greek and Anatolian Parallels of Palatalization

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Abstract: Ancient Greek historical phonology was defined in the 19th century by accounting for the outcomes of consonantal cluster palatalizations. These insights were further refined by the evidence of Mycenaean Greek in the 20th century. Ancient Anatolian has lagged in this regard, due in large part to the comparativistic inadequacies of Hittite scholars and the philological shortcomings of Indo-European linguists. This paper is an attempt to find that a balanced comparison of Greek and Hittite data can begin to redress such a drawback of Anatolian philology.

Keywords: Anatolian, Greek, Hittite, Mycenaean, palatalization

While postclassical Greek has been marked by the iotacistic forward shift of its vowel system, earlier times had witnessed the successive elimination of three nonvocalic continuant phonemes, /s/, /w/, /y/. The single reconstruable Indo-European sibilant had been weakened to /h/ in many initial and medial positions, and before the classical era had merged with zero via psilosis, aspiratory dissimilation, cluster reduction, or hiatus creation leading to vowel contraction. Digamma vanished in the course of the historically attested dialects, so that for example the equivalent of Argolic Doric *Φηδιεστας* ‘private person’ became *ιδιώτης* in standard Greek (*ιδιος* < **sw-idio-* ‘one’s own’); the word stem had worn away in aphaeretic attrition, leaving only the suffix (as in *ἐνδοσθίδιος* ‘internal’).

The large-scale disappearance of /y/ involved initial, intervocalic, postconsonantal positions; the last mentioned triggered the palatalizations which concern us here, involving erstwhile clusters *ky, k^wy, k^hy, k^{hw}y, ty, t^hy with voiceless stops, and voiced parallels *gy, g^wy, dy, resulting in phonetics (perhaps [tʰ] and [dʰ]) approximated in alphabetic script and dialectally by spellings such as (σ)σ/(τ)τ and ζ/(δ)δ. The Mycenaean syllabary favored its s series for the voiceless variety (especially *ty), while the ‘z’ (or ‘ss’) signs were used without voice distinction, though in attestations more for the guttural kind. A phonetic value [tʰ] for the outcome of *ty is suggested by the generally identical result of t+s, e.g. sigmatic aorists δάσ(σ)ασθαι, Mycenaean -*da-sa-to* of *δατέομαι*, θέσσεσθαι < **gh^wedh-s* ‘implore’ (cf. *πόθος* ‘longing’). The following are some random examples of these developments.

*ky : *σεύω*, aorist *ἔσσυτο* (Sanskrit *ácryuta*) ‘rush’, *λαοσσόος* ‘host-prodding’.
σῆτες, τῆτες, Mycenaean *za-we-te* (< **kyā-wetes* ‘this year’; Albanian *si-vjet*).
Mycenaean *ka-za-e* (< **kakyoses*; beside *κακίο(σ)* ‘worse’).
Mycenaean *su-za* (< **sukya*; beside *συκία* ‘fig-tree’).
ἄνασσα, Mycenaean *wa-na-so-i* < **wanaky-* ‘queen’).

πάσσαλος, Mycenaean *pa-sa-ro* < **pakyalos* ‘peg’).
*k^wy : *ὄσσα, ὄττα* < **wok^wya* ‘voice’ (beside *ὄψ* in accusative *ὄπα*, dative *ὀπί*).
*k^hy : *θάσσο(σ)-, θάττο(σ)-* (beside *ταχίο(σ)-* ‘swifter’).
*k^{hw}y : *ἐλάσσο(σ)-, ἐλάττο(σ)-* < **elak^{hw}ynos-* (cf. *ἐλαχύς, ἐλαφρός*) ‘lighter’.
*ty : *σέβομαι* ‘shrink from’ (< **tyeg^w-*; Sanskrit *tyājati* ‘abandon’).
τόσ(σ)ος, Mycenaean *to-so* < **totyos* ‘so much’.
μέλισσα, μέλιττα < **melitya* (or possibly haplogenic for **meli-lik^hya* ‘honey-licker’ [Sanskrit *madhu-lih-*] ‘bee’).
κρήσσα, Mycenaean *ke-re-za* < **krētya* ‘Cretan (fem.)’.
*t^hy : *σημα*, Doric *σῆμα* < **t^hyāma* ‘sign, monument’ (Sanskrit *dhyāman-* ‘thought’). *μέσ(σ)ος*, Boeotian *μέττος* < **met^hyos* (Sanskrit *mádhya-*, Latin *medius*, Gothic *midjis* ‘mid(dle)’).
*gy : *μέζο(σ)-*, Boeotian *μέδδο-*, Mycenaean *me-za-e* (< **megyoses*) ‘bigger’. Mycenaean *wo-za* < **wiḡyō-* (Avestan *varəzəyēiti*, Gothic *waurkeiþ* < **wiḡyēti* ‘works’), *ἔρδω* (with secondary root vocalism; future *ἔρξω*, perfect *ἔοργα* ‘work’).
*g^wy : *ζώω*, Boeotian *δώω* ‘live’, *ζωός*, Mycenaean *zo-wo* ‘(a)live < **g^wyō-* (beside *βίος* ‘life’).
*dy : *Ζεύς*, Boeotian *Δεύς* < **Dyew-* (Sanskrit *Dyaus*). *τράπεζα*, Doric *τράπεσδα*, Boeotian *τρέπεδδα*, Mycenaean *to-pe-za* < **k^wtw^r-pedyA-* ‘four-footing, table’.
ψηφίζο-, Boeotian and Cretan *ψαφίδδο-* < **psāp^hid-yo-* ‘to vote’.

The Anatolian languages next door to Greek offer hints of similar phonetic processes. Even as epichoric and standard alphabets struggled with written renderings, Hittite-Luwian cuneiform had limitations rendering outcomes of palatalization.

Borrowed inventory made provision for [s] and an affricate [tʰ], the latter written z(z) and resulting from *t+s, palatalized *t(+i) and *ty alike, also used to render Akkadian emphatic š, and alternating in initial position with rendering a sibilant (*sakkar* : *zakkar*, *samankur-* : *zamankur*) or a dental (*taluki-* : *zaluganu-*, *tesha-* : *zashai-*).

Even as occlusives were used in the syllabary regardless of voiceless : voiced distinction, it bears to reason that *s* and *z* did double duty for [z] and [dʒ] as well, as hinted by *zaluganu-* for etymological **d-* (Greek *δολυχός*).

The likely outcome of **ky* in Hittite would be [tʰ] written *z*, as in *zai-* < **kyāy-* ‘separate, divide, split, cross’, near synonym of *sarra-* (as in *arunan zai-* ‘cross the sea’ beside *ZAG-an zai-/sarra-* ‘cross the border’). With a nasal infix **kyāy-* yielded *kinai-* ‘separate, divide, sift, sort’, also matched in usage by *sarra-* (KUB 24.11 III 18 *nu kuitta arhayan kinaizzi*, beside duplicate KUB 24.9 III 26 *nu kuitta arhaya sarrai* ‘she divides everything separately’). The Greek cognate of *zai-* and *kinai-* is *σῶσι* (< **kyāyonti*) ‘they sift’, namely dried fish through filter cloth, to make fishmeal (Herodotus 1.200; cf. *kinanta* KU₆.HI.A ‘sorted fish’), *δια-ττάω* (< **kyāyō*) ‘sift’, *ἀλευρότης* ‘sifted flour’ (HED 4:179-181).

Similarly **ky* is written *-zz-* (geminate spelling for voiceless under ‘Sturtevant’s rule’) in the infinitive *pí-(e-)iz-za-u-wa-an-zi* ‘to pluck’ (< **peky-*, cognate with Greek *πέκω*, Latin *pectō* ‘comb, card’, Lithuanian *pešù* ‘pluck’, Old English *feohtan* ‘tussle, fight’ (HED 9: 69-70). Medial intervocalic **ty* was likewise rendered by *-zz-*, as in *appizzi(ya)-* ‘hindmost’ (Greek *ὀπίσ(σ)ω* < **opityo-* [HED 1-2: 93-94]) and its antonym *hantezzi(ya)-* ‘foremost’.

The outcome of **ty-* can also be written *s-* in Hittite, matched by a possible Luwian cognate with *t-*, similar to the Greek dialectal variation *σῶσι* : *-ττάω*. In support can be cited Hittite *sakuwant-* ‘thick, fatty’, *sakan* ‘fat, oil’ (< **tyogṇ*), if cognate with Luwian *tāin* ‘fat, oil’ and also with Old Norse *þjokkr*, Old Irish *tiug* ‘thick, fat’. There is also Luwian *taini(ya)-* ‘fatty, oily’ and a hapax *zagani-* of similar meaning, perhaps a hittitism with retention of medial guttural and initial *s/z* spelling variation (HED 10: 23). Similarly **ky-* can be represented by *s-*, if *sawitist-* ‘same-year’ (HED 10: 211) reflects **kyā-wetes-t-* (rather than **sīm-*; cf. Mycenaean *za-we-te*, Greek *σῆτες*, *τῆτες* ‘this year’).

The development of **gy* to [dʒ] (or possibly [dʒ] or [ʒ] or even [z], similar to Greek *ζ*) is illustrated by Hittite *masa-* (< **magya-*) ‘mass, swarm’ (of insects), cognate with Greek *μάζα* ‘blob, lump’ (borrowed in Latin *massa* ‘heap, mass’; HED 6: 92-93, 7: 155).

Another case is *sapasiya-* ‘observe, (e)spy’ < **spoḡyo-* ‘viewing, sighting’, comparable to Old Norse *speki* ‘insight’ (HED 10: 136). Further instances are *sasa-* ‘goat’ (< **sagyo-*, with *s-*movable; cf. Vedic *ajā-*, Lithuanian *ožys* ‘goat’), *sasan(n)a-* ‘oil lamp’ (< **tyogyono-* ‘oily appliance’; for suffix cf. e.g. *iskissana-* ‘dorsal prop, joist’; HED 10: 205, 206).

The same result may be present in *isiya(hh)-* ‘betoken, reveal’, if denominative of **ēḡyo-* cognate with Latin *aiō* ‘affirm’. *ad-agium* ‘proverb’, *prōd-igium* ‘portent’. Alternatively one can postulate a base **edhyo-* related to Sanskrit *āha*, Avestan *āda* ‘said, spoke’ (HED 1-2: 411-416).

Such ambiguity points to parallel development of **dy* (reflecting Indo-European **d* or **dh*), well documented by the rich harvest of **dyew-* in Anatolian, e.g. Hittite *siu(n)-* ‘god’, *siunali-* ‘divine’, *siwatt-* ‘day’, Luwian *Tiwat-* ‘sun-god’, Lydian *Ṭiws* ‘god’, *Ṭiwvalis* ‘divine’, perhaps also Hittite *asiwant-* ‘poor’ (< **ṇ-dyew-* ‘unendowed’, comparing Old Slavic *ubogŭ*, *nebogŭ* ‘poor’; HED 1-2: 212).

The certainty of **dyew-* > *siu-* opens up to new interpretation hitherto unquestioned or dubious Anatolian etyma, notably Hittite *sakui-/sakuwa-*, Luwian (both cuneiform and hieroglyphic) *tawi-/tawa-* ‘eye’. Rather than the ‘canonic’ pairing with Gothic *saihwān* (< **sekʷ-*, in egregious disregard of ‘Sturtevant’s rule’), *sakui-* and *tawi-* (with deocclusion of labiovelar) point to Proto-Anatolian **dyagʷi-* and Indo-European **dhyaghʷ-*, cognate with Greek *σάφα* ‘clearly’ (< **dhyaghʷṇ*, suffixless locative, literally ‘in the eye’), *σοφία* ‘insight, skill’, *σοφός* ‘skilled’, Thera Doric *ἐπίσοφος* ‘overseer’, matching in meaning *ἐφορος*, *ἐπίσκοπος* (HED 10: 56).

The pairs *sakan* : *tāin*, *sakui-* : *tawi-*, reminiscent of the Greek variation *σῆτες* : *τῆτες*, *ζῶω* : *δῶω*, are joined by Hittite *sehur/sehun-* : Luwoid *du-ú-ur* / Luwian *du-ú-na-ti* ‘crud, ordure, urine’, pointing to **dhyeHwṛ-* as verbal noun of a root seen in Hittite *sah-* (< **dhyoH-*) ‘clog, stuff’, perhaps cognate with Latin *faex* ‘dregs’, *foetidus* ‘ordurous’ (for loss of internal laryngeal cf. e.g. Luwoid *pawarriya-* ‘make fire’ beside Luwian *pāhūr*, Hittite *pahhur* ‘fire’; HED 10: 7).

New light can be shed also on *sam(m)ana-* ‘setting, grounding, base’, *sam(ma)nai-/samniya-* ‘set in place, found’, if taken in its prevalent verbal combination *samanan/samanus dai-/tiya-* as an obscured *figura etymologica* **dhHyṇmo-dhoHy-/dhHyi-* ‘set a base, found’ (for anaptyxis cf. Hittite *arunumana-* < **arunumna-* ‘maritime’, for formation Sanskrit *dyumná-* ‘sheen’; the initial variation resembles Aeolic *ζα-*, *Ζόνυσος* beside ‘normal’ *διά*, *Διόνυσος*). This etymology may further account for Luwian *tiyamm(i)-* ‘earth, ground’ as **dhHyimn-*, detaching it from Hittite *tekan* ‘earth’; for semantics cf. e.g. German *erdboden*, Latin *tellūs* ‘earth’; German *diele* ‘floor’ (HED 10: 101).

In Greek **tw* behaves like **ty*, as in *σάκος* ‘shield’, *σακεσφόρος*, *φερεσσακής* ‘shield-carrying’ (Sanskrit *tvác-* ‘skin’, Hittite *tuekka-* ‘body’), (*ἐπι-σ)σειώ* ‘shake’, *δοροσσός* ‘spear-shaking’ (< *tweys-*; Sanskrit *tviṣ-* ‘stir’), *σορός* ‘container, urn’ (Lithuanian *tverù* ‘contain, hold’,

Russian *tvor* ‘shape’), σός ‘thine’ (< **twos*, Latin *tuus*), τέσσαρες, τέτταρες, Doric τέτορες, Boeotian πέτταρες, Aeolic πέτυρες, πίσυρες (< **k^wetwr-*) ‘four’. In Hittite **tw* lingers, but **dw* was subject to vagaries in Anatolian languages, as in Luwian *kuwaya-* ‘fear’ (< **dwey-*, Greek δέιδω < *δεδφοια ‘am afraid’), Lycian *kbi* (< **dwi-* ‘two’ [same root!], but Milyan *tbi* [HED 4: 303]), *kbatra* ‘daughter’ (but Luwian hieroglyphic *tuwatara*).

In Hittite the result is found in *dān(-)* ‘second(ly)’ (< *dwoyom* [**dwey-* again!], but **dw* may also show up as *s-*, as perhaps in *sa/imesiya-* ‘vaporize, dismiss’, if

reconstructed as **dhwHṃsyó-* and matched by Sanskrit *dhvañsaya-* ‘evaporate, disperse’ (HED 10: 106).

All told, Greek data were largely set straight in the nineteenth century; Anatolian philology still has work to do in the twenty-first.

Abbreviations

HED – Puhvel, J. 1984–. *Hittite Etymological Dictionary*. Berlin and New York, Mouton de Gruyter.

Notes on the Representation of the Face of Cyrus the Great

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Abstract: Exactly how Cyrus the Great (559-530 BC) would have wished to represent his face in any formal context towards the end of his nearly thirty-year reign still remains a not fully resolved issue. Since Darius I (522-486 BC), the near successor of Cyrus, is known to have represented himself with a long beard, and since Darius also went to some lengths to try to portray his succession to the Persian throne as a more or less seamless process, there would seem to be a distinct possibility that Darius' Assyrian-related, full length beard was actually inspired by a similar form of beard that had previously been introduced by Cyrus. On the other hand, Cyrus appears to have had a particular interest, especially near the time of his conquest of Babylon in 539 BC, in presenting himself as the king of the storied highland Iranian city of Anshan in order to stress -- in terms that would have been readily familiar to a Mesopotamian audience -- his 'right to rule' over the time-honored cities of Mesopotamia. In this context, Cyrus may well have insisted on adhering to a short 'Anshanite beard' (presumably not unlike the short royal beard that had long been favored by the neighboring kings of Elam) -- and it could have been left to his eventual successor, Darius I, to introduce the elegant, long-bearded 'Achaemenid royal visage' that then prevailed down to the last days of Achaemenid Persian rule in 330 BC.

Keywords: Cyrus, Pasargadae, Babylon, Assurbanipal, Darius, Bisitun.

For centuries, or rather for millennia, there has been no certainty as to how Cyrus the Great (559-530 BC) would have wished to represent his face, even at the height of his authority.¹ The absence of any hard and fast evidence on this score has encouraged various commentators to conclude that the largely intact bas-relief of a four-winged, anthropomorphic guardian genius that occurs on a doorjamb at Gate R (Pl. 1a) -- the impressive gateway to Pasargadae, the capital of Cyrus -- could have been intended to represent the founder of the first Persian empire.²

Although aspects of the face of the four-winged genius at Pasargadae (Pl. 1b) can be said to preserve details of importance (including elements of a Persian, not an Assyrian, physiognomy), Herzfeld was careful to point out, a little over a century ago, that the apotropaic genius in question (Pl. 2) lacks many of the customary attributes of Achaemenid kingship including a long beard, a scepter or a bow, a lotus held in one hand, a royal tiara, and a standard form of pleated Persian robe. In addition, in keeping with the appearance of late Assyrian anthropomorphic protective beings (Pl. 3), the tall, carved bas-relief at Gate R is equipped with wings, a strictly superhuman attribute.³ Also, at whatever precise date Darius chose to place a copy of the trilingual CMa inscription on the same doorjamb as the already completed four-winged genius (Pl. 4), (i.e. at some date after the invention of the Old Persian

cuneiform script in ca. 519 BC),⁴ it is important to note that the inscription, which reads

I, Cyrus, the King, an Achaemenid (viz. erected this building),

was never intended to identify the singular winged genius that once stood beneath it.

Indeed, as Carl Nylander has indicated, the rules of symmetry in Achaemenid art would have dictated that this same inscription was originally carved in eight separate locations within Gate R, in eight further locations in Palace S, and in at least two locations in Palace P.⁵ The only labeled representations of Cyrus at Pasargadae (which are now known to have been carved early in the reign of Darius at a date near 510 BC)⁶ are also of no help. While each labeled, principal figure in the 'mirror image' doorway reliefs of Palace P originally bore third person inscriptions that read 'Cyrus, the Great King, an Achaemenid', the best preserved of these truncated royal images is preserved to no more than waist height (Figure 1).

All in all, therefore, it would seem to be necessary to explore as widely as possible in order to try to discover the nature of the 'official face' that Cyrus might have wished to introduce within say, the last decade of his reign. In this context it may be advisable, in fact, to turn to evidence from (a) the Cyrus Cylinder; (b) from the Assyrian-related sculptures at Pasargadae as a whole; and (c) from, the rock-cut relief of Darius I (522-486 BC) at Bisitun.

¹ It is a great pleasure to be able to offer the present paper to Gregory Areshian, a friend and colleague of longstanding with whom I share many separate interests in the archaeology of the ancient Near East.

² See, e.g., Shahbazi 1970: 19, 55, 256.

³ Cf. Herzfeld's remarks in Sarre and Herzfeld 1910: 159. Note also Stronach 1978: 47-55; 2010: 6-9.

⁴ See, e.g., Stronach 1990.

⁵ Nylander 1967: 156. Cf. also Stronach 1978: 102, n. 123.

⁶ See Stronach 1978: 100.

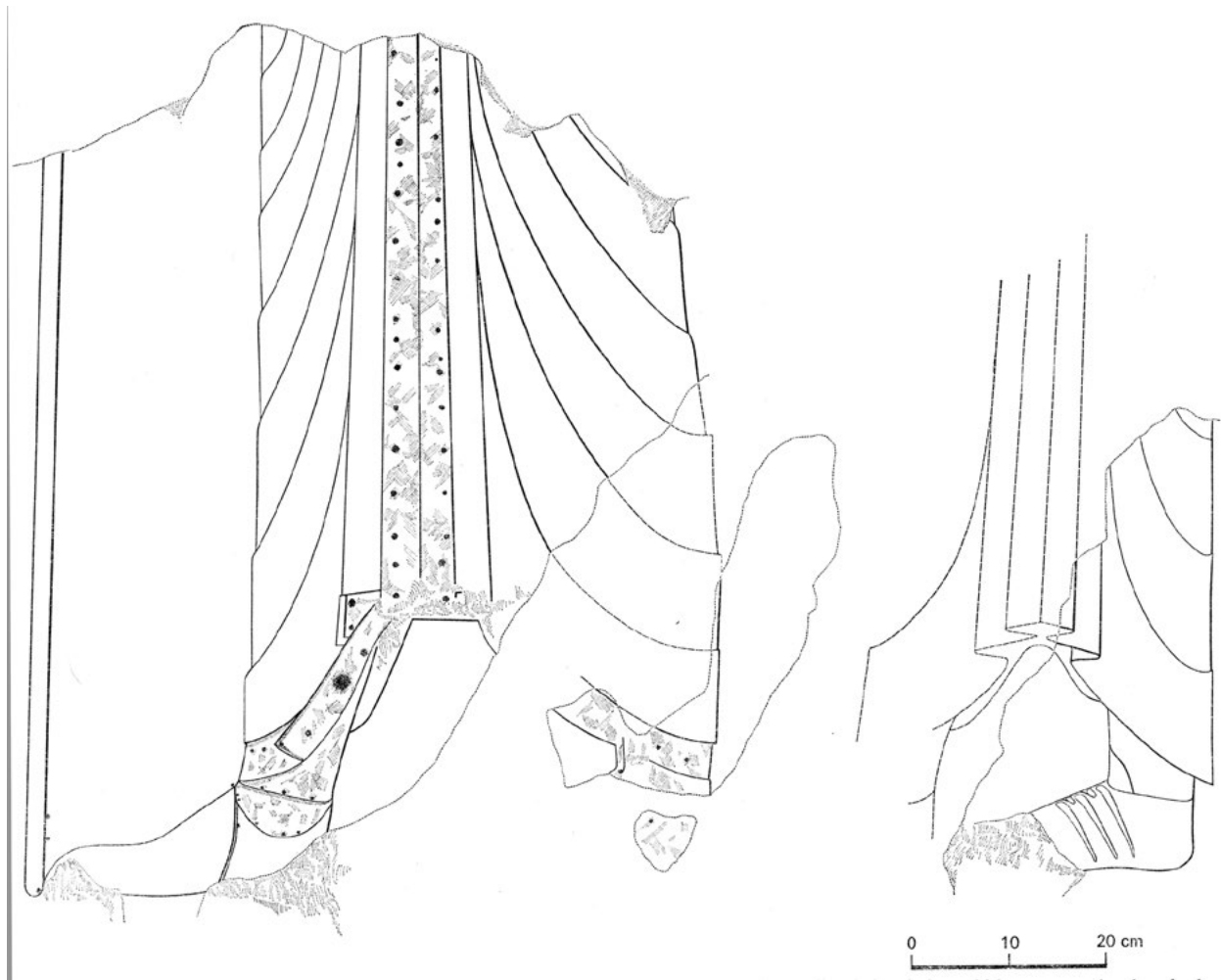


Figure 1. Pasargadae. The extant remains of one of four matching doorway reliefs found at Palace P. The small-scale cuneiform inscriptions of ca. 510 BC that identify the dominant personage in the composition as 'Cyrus, the Great King, an Achaemenid' are not illustrated in the present drawing. (After Stronach 1978: Figure 47.)

Evidence from the Cyrus Cylinder

Given the contrast that exists between the reputation of the Assyrians for harshness and cruelty and that of Cyrus for an unusual degree of generosity, it is quite remarkable to note the extent to which Cyrus was influenced by precedents that reflect the imagery of Assyria. But as Kawami first suggested more than forty years ago, Cyrus' interest in borrowing from the Assyrian sculptural canon was almost certainly connected with his wish to be recognized as 'the heir to Assyrian power.'⁷

In the text of the Cyrus Cylinder, a document that was drawn up soon after Cyrus took possession of Babylon in 539 BC, we learn, not least, of measures that Cyrus took to renovate the inner wall of Babylon, known as

Imgur-Enlil.⁸ As Cyrus' partly first person account in the Cylinder relates, 'I saw within it [i.e. within the fabric of the wall] an inscription of Assurbanipal, a king who preceded me.'⁹ As Finkel has noted, it must have been a moment of some gratification for Cyrus to be able to demonstrate that, while he was a Persian from beyond the eastern borders of Babylonia, 'he knew how to behave like a Babylonian in matters of religion, administration and tradition in general.'¹⁰

More than this, however, it is worth stressing that Cyrus would appear to have gone out of his way to mention the discovery of an earlier foundation cylinder that was not connected to a prior ruler of Babylonian ancestry, but one that was owed to Assurbanipal (668-630 BC) – a previous builder at Babylon who was of global stature

⁸ Line 38. Cf. Finkel 2013: 7.

⁹ Line 43. Cf. Finkel 2013: 7.

¹⁰ Finkel 2013: 11.

⁷ Kawami 1972: 148.

and not, of course, of Babylonian origin. Indeed, it is tempting to think that this specific reference to Assurbanipal stands in line with one of Cyrus' hitherto little-examined aspirations: namely a desire to have the scale of his rule – and that of his royal line – directly compared to that of Assurbanipal's once unexcelled global reach.

Assyrian-related sculptures at Pasargadae

With reference to Cyrus' innovative building program at Pasargadae, which most probably began a little after 547 BC (i.e. following his capture of Sardis and hardly more than sixty-five years after the fall of Nineveh in 612 BC), Cyrus took a critical decision to follow the lead of the Assyrians in placing bas-reliefs on the stone doorjambs of certain of his main buildings. In keeping with this decision, the models for many of Cyrus' sculptures were apparently taken from the vivid but recently orphaned corpus of late Assyrian protective imagery. Further, the models in question can be seen to have been drawn from intact doorway reliefs that were presumably still visible in the last two major Assyrian capitals, i.e. from either Dur-Sharrukin (modern Khorsabad) – the capital of Sargon II (722-705 BC) – or from Nineveh, the city which Assurbanipal himself refers to, in one of his inscriptions, as the seat of his 'lordship'.

It may be appropriate at this point to cite a key part of the latter inscription, which makes prominent mention of an earlier Persian ruler, and which would appear to have been composed not long after Assurbanipal's sack of Susa, the capital of Elam, in 646 BC. As Assurbanipal relates:

'Cyrus, the king of Parsumash, heard about my victory. He became aware of the might that I wielded with the aid of Assur, Bel, and Nabu, the great gods my lords, with which I leveled the whole of Elam like a flood. He sent Arukku, his eldest son, with his tribute to Nineveh, the city of my lordship, to pay homage to me. He implored my lordship.'¹¹

What should also be underscored, especially in the present context, is that Arukku's obligatory sojourn at Nineveh was far from unusual. Just as numerous princes from Elam were obliged to reside as 'guests' at Nineveh, not a few members of the royal house of Persia very possibly found themselves in a like situation. And, as Matt Waters has indicated, such episodes of 'royal children and their entourages living at the Assyrian court'¹² could eventually have had visible effects on

the cultural diversity of the lands from which they originated. Thus, even if there are no known Assyrian-related artifacts from within the bounds of present-day Fars that would appear to pre-date the beginning of the reign of Cyrus the Great, an engraved bronze bowl from a princely tomb near Arjan illustrates not a few details of local dress and local wine drinking equipment that would appear to affirm the presence of strong influences from Assyria in the broad vicinity of Fars at a date close to 600 BC.¹³

In other words, the Assyrian-related protective doorway figures that are now known to have been introduced at Pasargadae during the 540s and 530s would probably not have been totally unfamiliar to the local population, let alone to others of Cyrus' subjects from more westerly locations. And while this is not the place for a comprehensive review of this intriguing corpus of borrowed Assyrian imagery, it is only appropriate to stress the high quality of the copies of the various images that were selected for public display.

Visitors to Pasargadae, who had to pass through the aforementioned gatehouse, would have been initially aware of a huge pair of bull colossi that faced outwards and, shortly thereafter, they would have encountered a second pair of most probably human-headed bull colossi that faced in the opposite direction, looking towards the two inner palaces, Palace S and Palace P.¹⁴ The inspiration for such towering stone guardians undoubtedly came from Assyria; and, in at least one case that may be mentioned here, the protective powers of a human-headed bull colossus that stood guard at one of the gates of the citadel of Sargon II at Khorsabad can be seen to have been further fortified by the nearby presence of an anthropomorphic winged genius.¹⁵

In the absence of the four bull colossi that originally guarded Gate R, each of which is likely to have been dismantled in or near the 11th century AD,¹⁶ the earliest Assyrian-related reliefs that survive at Pasargadae (apart from the four-winged genius itself) would appear to be those that still stand – in a far from complete condition – in the northwest and southeast doorways of Palace S.¹⁷ As the drawing in Figure 2 indicates, the paired supernatural beings that are shown in the northwest doorway of Palace S consist of the fragmentary remains of a *lulal* or 'smiting god' followed by an *ugallu* or 'lion-demon'. This was, in fact, a popular pairing in late Assyrian art in general,¹⁸ quite apart from the fact that this pairing was also represented in one of the doorways of the Palace of Sennacherib at

¹¹ See, e.g., Waters 2014: 35.

¹² Waters 2014: 36.

¹³ Cf. Majidzadeh 1992: Figure 1.

¹⁴ Herzfeld 1929-30: 5. Cf. also Stronach 1978: 44, n. 7.

¹⁵ See, conveniently, Lloyd 1978: Plate 145.

¹⁶ Stronach 2010: 9.

¹⁷ Cf. Stronach 1978: 68-70; 1997: 44-45.

¹⁸ Black and Green 1992: 165-166.



Figure 2. Pasargadae. The remains of the Assyrian-related supernatural beings that appear on the best-preserved jamb of the northwest doorway of Palace S. (After Stronach 1978: Figure 34.)

Nineveh (Figure 3)¹⁹ as well as in one of the doorways of the North Palace of Assurbanipal at Nineveh.²⁰

With respect to the images that are found on the jambs of the southeast doorway of Palace S, the evidence that survives points to the pairing of an *apkallu* (a fish-cloaked genius) and a bull-man or *kusharikku* (Figure 4). The combination of these two eye-catching apotropaic beings would appear to have been relatively rare in Assyria itself, but it is nevertheless known to have occurred in at least one relevant context. In a letter that Hormuzd Rassam wrote to Henry Rawlinson on January 19, 1854, he reports finding a doorway relief in Assurbanipal's North Palace at Nineveh with just such a pairing of supernatural beings.²¹

With reference to the testimony of the finely executed Assyrian-related reliefs at Pasargadae, it is evident, in short, that Cyrus had a considerable regard for what he took to be intimations of far-reaching legitimate rule that could be found in the more pacific elements of Assurbanipal's sculptural program. The question still is, of course, how this relates to the manner in which Cyrus chose to represent his face, either with a short beard (in keeping with that of the four-winged genius of Gate R) or with a long beard (in keeping with one markedly durable Assyrian tradition).



Figure 3. Nineveh. Divine guardians from the palace of Sennacherib at Nineveh. (After Barnett *et al.* 1998: 91-92 and pl. 266. Cf. also Stronach 1997: Figure 19.)

The Face of Darius the Great at Bisitun

As Michael Roaf was the first to point out, the head of Darius I as it is depicted in the latter's relief at Bisitun (Figure 5a) and the head of Assurbanipal as

¹⁹ Barnett *et al.* 1998: 91-92.

²⁰ Barnett 1976: Plate 4.

²¹ Barnett 1976: 42.

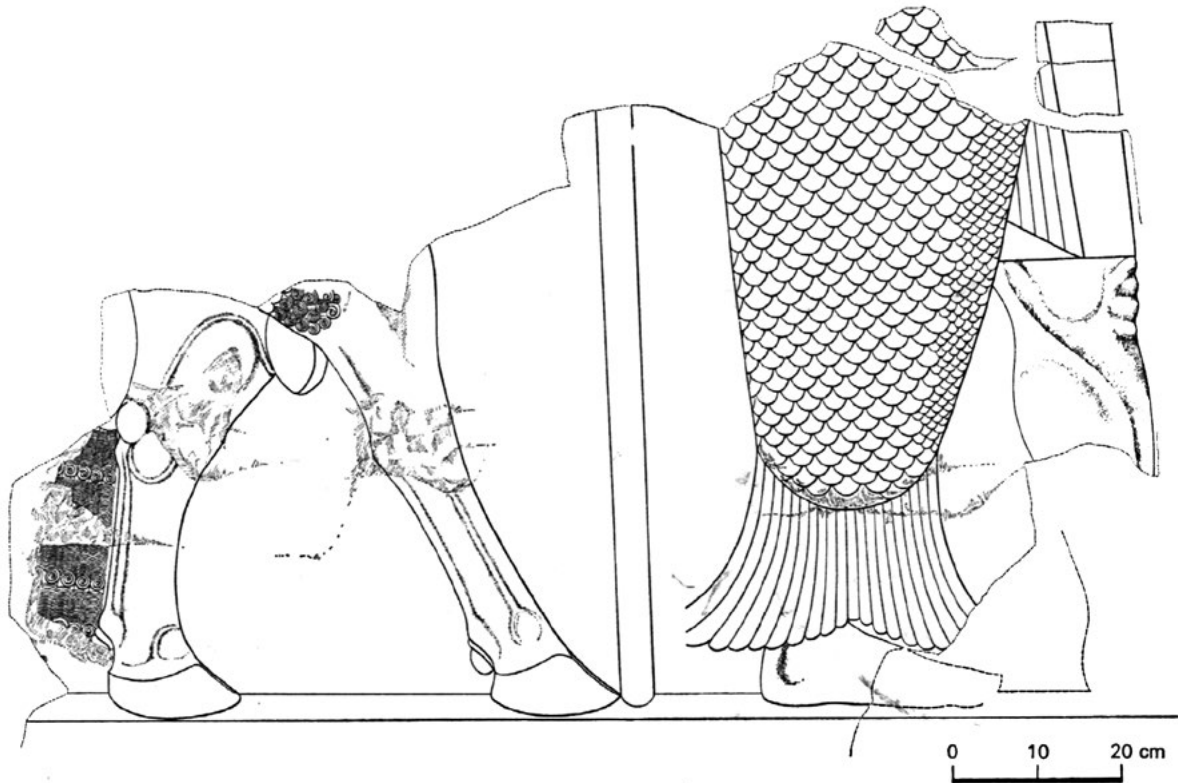
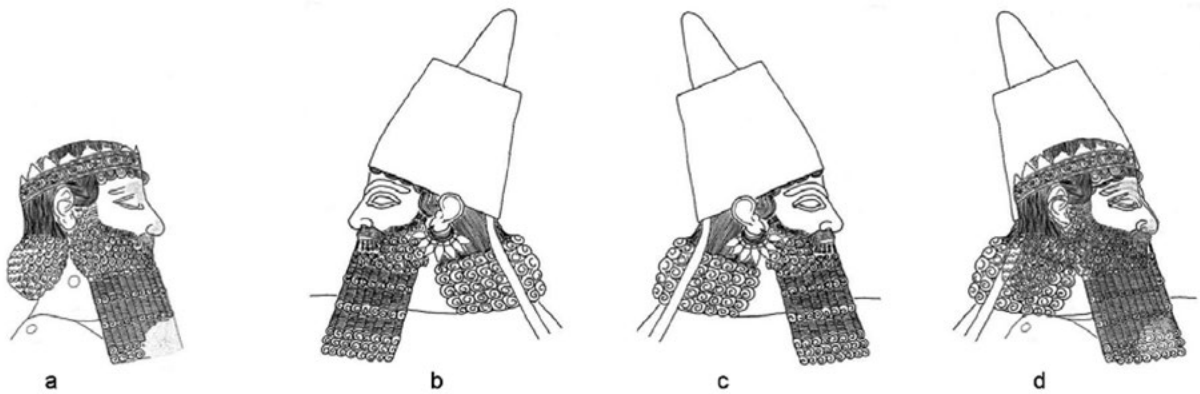


Figure 4. Pasargadae. The remains of the Assyrian-related supernatural beings that appear on the best-preserved jamb of the southeast doorway of Palace S. (After Stronach 1978: Figure 35.)



Figures 5 a-d: (a) the face of Darius at Bisitun; (b) a depiction of the face of Assurbanipal at Nineveh; (c) a mirror image of the face of Assurbanipal; and (d) the faces of Darius and Assurbanipal superimposed. (After Roaf 1989: Figures 10 and 11; and Roaf forthcoming).

it is depicted in reliefs from Nineveh (Figure 5b) are markedly similar.²² Thus, if we take the mirror image of the aforementioned head of Assurbanipal (Figure 5c) and superimpose this version of Assurbanipal's head on that of Darius (Figure 5d), the two match almost exactly.

In other words, there are differences in the crowns of the two kings, in their earrings and in the way that their hair is arranged on the backs of their necks, but in all other respects 'the similarity is striking.'²³

²² Roaf 1989: 35.

²³ Roaf forthcoming.



Plate 1a. Pasargadae. Gate R seen from the northwest in 1961. The doorjamb with the relief of the four-winged genius stands at the mid-point of the structure's long northeast wall. (Photo: D. Stronach.)



Plate 1b. Pasargadae. The face of the winged genius at Gate R as it appeared in 1971. Despite the worn condition of the relief, the photograph still captures details of not only the short beard, but also other parts of the face as a whole. (After Stronach 1978: pl. 46b.)

None of these statements is in dispute. What still needs to be closely examined, however, is the date at which this particular type of Assyrian-related Persian royal visage was introduced. Although Darius could well be the author of this specific image, it would also seem possible that it reflects Cyrus' still earlier search for a suitable Assyrian-related facial image that could have been used to express his new-found pre-eminence from 539 BC onwards. In other words, in Darius' search for 'seamless continuities' between Cyrus' reign and his own subsequent reign, it is not by any means impossible that Darius' representation of himself in his victory relief at Bisitun adhered as closely as possible to an already widely known, Assyrian-related 'Persian royal visage' that had been introduced a few years earlier by Cyrus. At the same time, however, such a conclusion does not seem to take account of every aspect of the available evidence.

In particular, a close examination of the face of Darius in the Bisitun relief (Pl. 5a) seems to reveal a very



Plate 2. Pasargadae. Drawing of the four-winged anthropomorphic guardian genius that stands in Gate R. (After Stronach 1978: Figure 25.)

conceivable, sudden change of plan. In as much as the lower part of the long beard of Darius would appear to have been carved on a rectangular stone inset, it is possible to argue that Cyrus originally favored a short beard; that this was the type of beard that was initially copied at Bisitun; and that Darius only elected at the last possible moment to favor a full-length beard.

The challenges inherent in making the final, detailed changes to Darius' complex relief at Bisitun were no doubt considerable -- and it must have been a matter of some relief to Darius' sculptors that their intricate adjustments could be completed, not directly at ground level but at a distant remove, far above the course of the main east-west trunk road as it wound its way through the Zagros mountains.

As to the implications of the foregoing observations, several further points of may be mentioned. In the first place, the possibility that the Persians and the Elamites



Plate 3. Khorsabad. A winged genius with a long square-tipped beard from the palace of Sargon II. (After Stronach 1978: pl. 188.)

originally shared a preference for short royal beards, while the Assyrian preferred long royal beards, is but one of many reminders of the different ways in which Persian, Elamite and Assyrian predilections must have interacted with each other in southwestern Iran for a significant part of the first half of the first millennium BC.²⁴ In addition, the present enquiry serves to remind us of the extent to which age-old memories of 'the city of Anshan' probably still remained a graphic concept in the minds of many of the inhabitants of southwestern Iran long after this once substantial location offered no more than a pale reflection of its former renown.²⁵

²⁴ For illustrations of the short royal Elamite beard of mid-seventh century date, see, e.g., Barnett and Forman 1960: Plates 118-127; also Roaf 1990: lower illustration on p. 190 and Root 2011: Figure 7.

²⁵ This account may perhaps neglect to stress the full extent to which nothing more significant than the presence of certain floors in the rock could have dictated the various secondary procedures that were introduced by Darius' well-trained sculptors. On the other hand, it cannot be denied that the characteristics of the royal visage that eventually took shape in Darius' earliest rock relief (Plate 5a) definitely paved the way for a very interesting--and no doubt intentional--degree of ambiguity between the divine facial features of Ahuramazda and the facial features of the king, the crown prince, and the 'royal hero' in the fully evolved conventions of Achaemenid art.

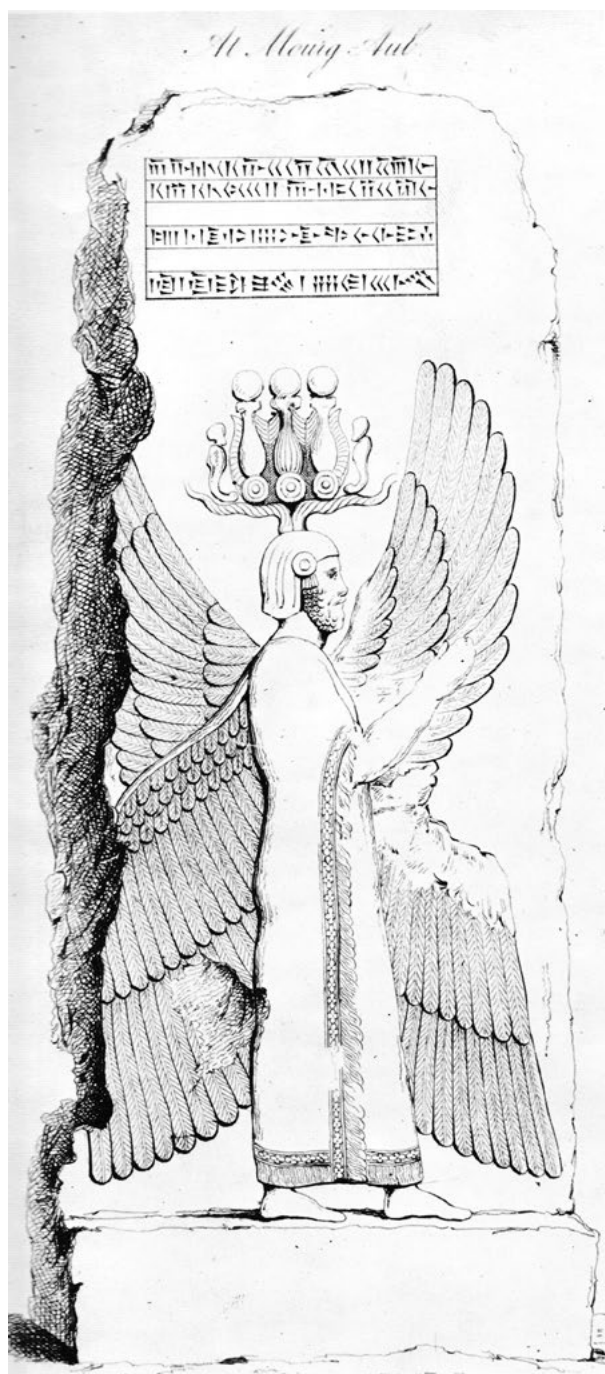


Plate 4. Pasargadae. Sir Robert Ker Porter's drawing of the four-winged guardian genius, drawn in 1818 when the last of Gate R's original eight CMa inscriptions still remained in situ. (After Porter 1821: pl. 13.)

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Plate 5a. Bisitun. The head of Darius I, carved in approximately 520 BC. Note especially the well-defined rectangular inset on which the whole lower part of Darius' square-tipped full-length beard was displayed. (After Stronach 1978: pl. 189c.)

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Plate 5b. Bisitun. Darius I, portrayed near the mid-point of his Bisitun relief. In this view it is possible to detect not only the stone inset that was apparently used to depict the whole lower part of Darius' beard, but a number of further stone insets that were used in this same part of the relief in order to complete the depiction of the bow held by Darius and the depiction of a further royal bow held by one of Darius' two attendants. (After Stronach 1978: pl. 190b.)

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Probable Reasons for the Occurrence of Comparable Abstract and Figurative Designs in the Art Inventories of Different Ancient Cultures Since Prehistory

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Abstract: It is assumed that some if not most abstract motifs that decorated internal house walls, shrines, stone and ceramic vessels, amulet-like objects, stamp seals and occasionally figurines in different prehistoric societies could well be enigmatic expressions of inherent spiritual notions. To explain the spiritual complexity of the human mind or mental mechanisms that designed such motifs and tried to preserve them in order to pass them onto new generations with their original or revised sacred notions that they expressed requires an interdisciplinary and multi-faceted scientific approach including neurophysiology which is well beyond the scope of traditional archaeology.

Keywords: Art, abstract, prehistoric, Neolithic, symbols, spiritual expressions, ethnographic, entopic phenomena, archetypes, neurophysiologic

Ever increasing inventories of painted or engraved designs decorating numerous caves and rock shelters since the Paleolithic era, later on adorning stone monuments, domestic or religious structures since the Early Neolithic period in different corners of the world are enriching the universal corpus of abstract motifs and symbols. They were also applied on a variety of artifacts including figurines, amulets and seals. One of the questions preoccupying archaeologists and prehistoric art experts which require at least a tentative explanation has to do with occasional similarities in symbol designs observed in different cultures. The interpretation of certain signs and symbols as part of prehistoric semiotics, in other words their possible metaphoric and communicative values, no matter how speculative, deserves consideration and similarities some explanation.

We could postulate that most signs and abstract motifs in prehistoric art inventories were meant to express and preserve mentally generated or culturally inherited spiritual notions in a locally developed enigmatic language of symbols. In order to grasp why and how meaning carrying signs were created and passed on by humans, and not necessarily what they might have symbolized in each case, the semiotics of symbol-rich Anatolian Neolithic art requires an interdisciplinary and multi-faceted scientific approach including neurophysiology which is beyond the scope of traditional archaeology. Anthropological studies conceptualizing human behavior could also demonstrate the predictability of the mind in the manner it visualizes, expresses and transmits a multitude of spiritually defined ambiguous notions.¹

Neurophysiology which explains the relationship between the physical brain and behavior lead us to believe that similarities in the complex nature of the human mind responsible for spiritual and perhaps emotional expressions in images and symbols suggests the existence of identical mechanisms activating the human brain's subconscious, conscious and/or altered conscious dimensions.² Therefore, when speculating on the significance of certain abstract and naturalistic motifs encountered in prehistoric and ethnographic art inventories, each in its respective context, one could advance the view that some of them may have been abbreviated expressions of certain spiritual notions, perhaps even serving as visual metaphors. Although such motifs and symbols would have had several comparable or different meanings, some of them could perhaps be traced to forms created by nature and/or induced mental images of the human mind preoccupied with religiosity in different intensities since prehistory. Religiosity is said to be grounded in human neuropsychological system. Its practice is rooted in culturally modified transcendental beliefs maintained by tradition and persuasion.³ Beliefs in a supernatural realm regardless of their diversity are universal. In Lewis-Williams' words (2008: 27), 'they are in some way wired into the human brain.' Therefore, it should not be very surprising to find that prehistoric and ethnographic examples of indigenous

sciences related to human behavior and culture, using experiences of the past to understand the present and build the future. In his words it is important 'to understand human behavior and cultural trends, recurring and isolated phenomena, and predictable and unpredictable evolution and change, not only in technology, but also in social, intellectual and spiritual life. It is a journey of discovery and emotions.' (2015: 5).

² Robinson 2005.

³ For detailed analyses see, Culley 2008: 68-69; Lewis-Williams 2008; Whitley and Hays-Gilpin 2008: 14.

¹ Anati agrees with this long held view that conceptual anthropology is the discipline that combines aspects of human and social

art from different corners of the world demonstrate a universal human tendency to visually express spiritual perceptions relating to the transcendental and sacral dimensions of the universe and mythical narratives in rather comparable forms and styles despite cultural differences and different timeframes. This supports the assertion by some scholars that prehistoric people did not invent images since they already possessed them.⁴ They reproduced them by projecting their mental visions on hard surfaces to create permanent images. Originating in similar introverted states of the human mind, as opposed to the alert consciousness that relates to the physical environment rationally⁵, similar associative thinking and imagination could create comparable narratives relating to primordial beginnings with intertwined human-animal interaction. This could explain the existence of similarities in the use of certain symbols in expressing relatively similar notions and narratives despite temporal, cultural and ethnic differences.

It is generally agreed that visionary experiences enthrall a presentational symbolism involving symbolic imagery and engaging brain structures associated with processing perceptual information.⁶ As a medium, imagination becomes a world where thoughts and images entrenched in the mind could form mental concepts not actually present to the senses.

Perdue acknowledges Sartre's view that art is the expression both of the imagination itself and the higher truth conceived by the imagination.⁷ In pursuing this line of thought we may argue that some of the two and three dimensional animal and anthropomorphic stone Figures from Göbekli Tepe, Nevali Çori, and a few other sites in the region could have referred to animal qualities such as ferocity, protective power, and intelligence perhaps in reference to divine forces of nature, and a variety of mystic attributes in spiritual contexts as visual metaphors, while composite human and animal figures could have conveyed mental images of mythical narratives. In Bieseles's view the metaphors of trance permeate myths.⁸

The same speculative assessment could be relevant in the interpretation of the rich assortment of artworks in the inventory of Neolithic Çatalhöyük. When comparing the prehistoric art inventories of temporally and regionally defined cultures (e.g. Göbekli Tepe and Çatalhöyük), one could notice, despite differences in material, style or methods of execution, that they were inspired by rather similar innate thoughts of spiritual nature.

Considering that spirituality is imbedded in the subconscious but prone to manipulation by persuasion or cultural indoctrination, it is not surprising that the human mind devised comparable 'divine' aspects attached to nature's forces they were exposed to. This spirituality requiring locally prescribed and manifested religious acts of appeasement probably helped allay the ever existing conscious fear of an uncharted destiny, including the one perceived as awaiting the individuals in the aftermath of death. Conceiving in the collective mind the existence of unseen but nevertheless describable immortal and deified beings in spirit form deemed superior to humans in power and intelligence would have been mentally soothing, as still is for a very large majority of the world population. Belief in rebirth, reincarnation, or life after death provided, and still does in some religions, a sense of hope for a fresh beginning. In other words, much like nature's everlasting renewal, imagining a similar lifecycle for humans could have been part of our prehistoric ancestors' innate anticipation. Such beliefs might have existed well before the construction of temple-like structures by socially well organized hunter-gatherer communities.

The inbred human emotion systems and associative thinking could have been one of the reasons for the choice of comparable symbols and abstract forms used in encoding or abbreviating spiritual notions in different cultures and timeframes. Among the multitude of symbols that have been recorded in cave paintings, wall paintings, decorated stone and ceramic vessels, seals and amulets, those recurring over the millennia include the spiral and concentric circles. The latter could have been inspired by intersecting ripples created by rain on a water surface or visual experiences/visions derived from within the eye or brain referred to as entoptic phenomena (Figure 1a-e). Examples of such abstract symbols are widespread. For instance the earliest agro-pastoral rock art from the uninhabited La Salamanca cave and the engravings on rocks along the Las Papas path presumably produced during pre-first millennium AD are mostly non-figurative designs that include zigzags, curvilinear crosses, simple and concentric circles.⁹ The 7 x 5 m granitic outcrop known as the Rock of the Signs (Laje dos Sinais) on the hillside of Monte da Saia, in Barcelos¹⁰ is another example of the existence of similar or comparable motifs in rock art (e.g. concentric circles, concentric UU's, in this case presumably third to second millennium BC.¹¹ Since

⁴ See also Lewis-Williams 2002b.

⁵ Lewis-Williams 2008: 27.

⁶ Hunt 1995; Winkelman 2008: 52.

⁷ Perdue 2003.

⁸ Bieseles 1993: 83–98.

⁹ Basile and Ratto 2015: Figures 1-2, 11. These two researchers noted that the rock art sites assigned to the first millennium AD in the Fiambala region, unlike those assigned to the second millennium AD seem to be visually and spatially segregated from dwellings as well as daily activity areas. They are also segregated from the dwelling places of both the living and the dead (villages, temporary posts, crop fields or burials).

¹⁰ Coimbra 2015: 34, Figure 1.

¹¹ Coimbra 2015: Figure 1, 35.

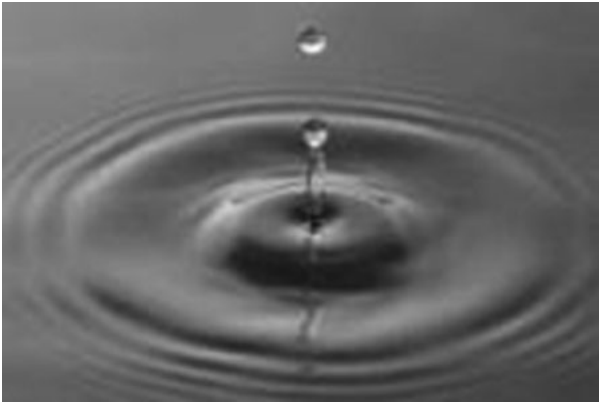


Figure 1a

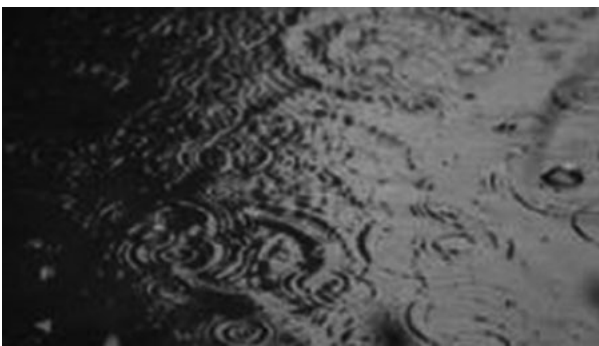


Figure 1b



Figure 1c



Figure 1d-e

in this case as in many others such signs sometimes arranged according to a specific pattern do not seem to have been created for decorative purposes, a semiotic purpose such as transmitting a message or information cannot be ruled out.¹² According to some scholars, the northwestern Iberian rock art suggests certain differences of purpose for the creation of signs.¹³ Indeed engravings of weapons, riders, or hunting scenes on vertical rocks would have been seen from a certain distance, whereas abstract signs made on horizontal surfaces would have been visible at the spot looking down. Therefore it is assumed that they served to mark sacred ritual places for locals. The signs themselves may have been messages of spiritual nature. Bouissac and Khan in their semiotic and symbolic approach to rock art categories proposed that certain sets or compositions, whether a visual record of an event or symbolic in nature represent concepts, categories or values.¹⁴ In either case they would have served as some sort of records in the mnemonic process mechanism that recounted and transmitted certain events and myths.¹⁵ Locations where rocks were marked with petroglyphs could have been considered sacred since prehistoric times, perhaps due to the presumed belief that divine spirits would manifest themselves during rites performed by shamans or shaman-like spiritual individuals.¹⁶

A coiling snake, cobwebs, downpour of hailstones (Figures 2a-c; 3a-d), lightening and other natural phenomena could have been sources of inspiration in creating meaning bearing motifs that seem similar in design. One may further speculate that associating entoptic phenomena visions with nature's corresponding forms and images could have perhaps been responsible for the existence of comparable abstract expressions of corresponding notions and meanings in different cultures.

Certain geometric and linear patterns in prehistoric and ethnographic art inventories could have been originally inspired by memory retained entoptic phenomena imagery. Laboratory experiments using goggles with strong LED lights demonstrate that an altered state of the brain can be induced through visual driving leading to entoptic phenomena experience (Figures 4a-b). Visions described as being luminous, pulsating, contracting, expanding and blending, may include changing geometric shapes, multiple zigzagging lines, dot-like circles, grids, meandering lines and broad U-shapes (Figures 4c-d).

Considering the distant ancestry of most ethnographic art forms we may presume that symbols encountered

¹² Coimbra 2015: 36.

¹³ Pena Santos and Rey Garcia 1993

¹⁴ 1995.

¹⁵ Coimbra 2015: 36.

¹⁶ See also Benito del Rey and Grande del Brio 1995: 7-89.



Figure 2a



Figure 3a

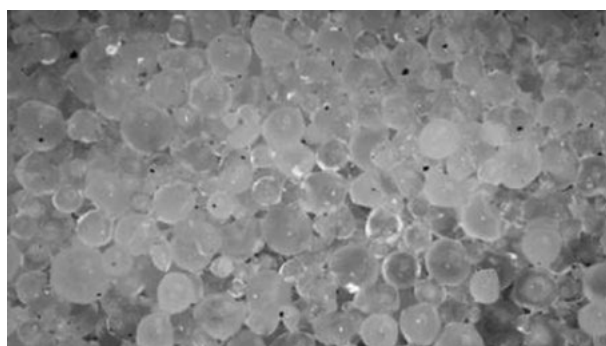


Figure 2b



Figure 3b

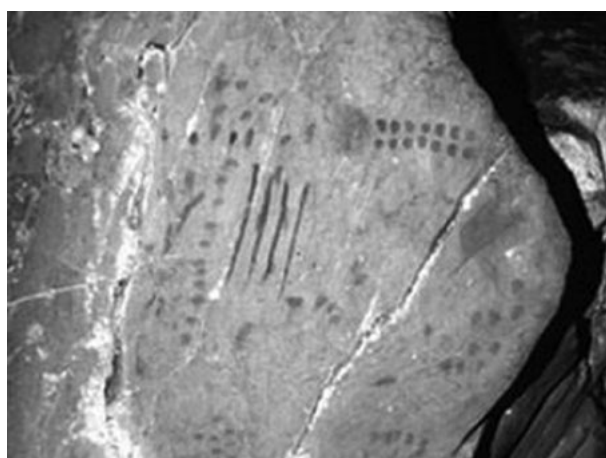


Figure 2c



Figure 3c



Figure 3d

in various prehistoric art inventories probably expressed spiritual notions with recognizable reference points within a culture. This impression concurs with Carl Jung's long held view that images constitute the primary natural language of human spiritual expressions or explanations of deeper spiritual meanings. Similarities in visual expressions of spiritual notions could not always be explained as the outcome of cultural contact.



Figure 4a

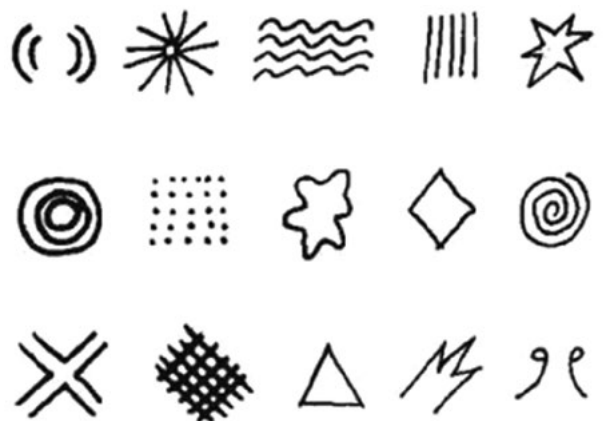


Figure 4d

The universality of the collective unconscious factor could be one of the explanations. Carl Jung whose observations of the human mind have been influential not only in psychiatry but also in philosophy, history of religion, anthropology and archaeology argued that psyche is also transpersonal, resting upon a larger collective unconscious belonging to all humankind.¹⁷ He argued that at the root of the human psyche are archetypes which exist in their original raw and primitive states, patterns and images that derive from the collective unconscious are universal and constitute the psychic counterpart of instincts which are fixed action patterns. In their original state archetypes could be paired as male and female, mother and sister, father and brother, goddess and witch, god and devil. Beliefs in the semi-god heroes, humans, animals and imaginary monsters gifted with supernatural power have their prehistoric roots in the collective subconscious. The theory that humans inherit these archetypes in outlines, projecting them into the outer world after attributing culturally prescribed positive or negative

¹⁷ Jung 1964.



ENTOPTIC PHENOMENA		
	A	B
I		
II		
III		
IV		
V		
VI		

Figure 4b-c

meanings makes some sense when trying to explain the reason for similarities in visually expressed spiritual notions in dissimilar cultures. The unique human trait of expressing mystical primordial thoughts encoded in symbols most likely goes back to the Paleolithic period. Some philosophers and art historians also define symbolism as the art of thinking in images (e.g. Ananda Coomarswamy).¹⁸ A good example is the painted dots and lines in the Chauvet Cave (Southern France) (Figure 2c).

Symbolic signs in addition to their primary inherent referent could also represent secondary more abstract referents, connected with the former by a logical link. In semantic terms one could say some or most symbols offer multi-layered meanings.¹⁹

¹⁸ Cirlot 1962: 29-30.

¹⁹ Although some symbols provide reasonable visual approximations to their referents in most cases they have little or no resemblance at all (Lloyd and Fullar 1990: 216). Ethnographic examples demonstrate that symbols vis-à-vis their referents are rarely transparent or translucent; in many instances they are rather opaque. In transparency the symbol's referent can only be guessed.

The direct meaning of a symbol could be imbedded in the primary or secondary referent often sharing the same sign.

Universally shared features of symbols include ingrained imagination veiled in ambiguity and having an archetypal nature as well as their integration into the structure of secondary semiotic systems. The ingrained ambiguity or vagueness of a symbol raises the problem of its different meanings in particular contexts for different purposes within the same and/or different cultures.

In various literary cultures archetypal symbols often retain their rather ambiguous primary and secondary meanings. These symbols derive from humans' primary understanding and interpretation of nature's physical features and universe. Among the archetypes that survived in the human subconscious the sky symbolized a supreme male figure/s of creation with life providing and regulating properties. While the earth was revered in most cultures as divine mother earth, the sea stood for the world before creation, a primordial chaos inhabited by a creator deity or deities. It also symbolized the eternal cycle of birth and death.²⁰ The egg symbolized the primeval embryo which produced the world. Among other archetypes the snake also appears in many cultures ever since prehistoric times as an attribute of a chthonic deity for the dead in the underworld. The bird on the other hand linked/communicated between the worlds of the mortals (symbolized by a tree and/or mountain of life), and immortals (sky). It is presumed that the archetypal meaning of the river is the linear time of human life, where the source is the world of souls, the middle part is the course of earthly life, and the lower reaches are the world of the dead.²¹ Symbols that have no logical links to their designation could have resulted from primitive syncretism of notion and from erroneous association of notions owing to accidental coincidence of forms of words.²² Additional examples suggest that prehistoric artists devised a system of up to 26 symbols including squiggles, circles, concentric circles, semicircles, net patterns, lines, zigzags and others which crop up not only throughout the prehistoric world but also in the art of some native cultures (Figure 5b). One could consider them constituting the earliest form of script. Neurophysiological studies have shown these forms to be typical hallucinations in the first stage of the trance state.

In translucency, the referent is perceived to be present in the symbol (Fullar and Lloyd 1991: 296). In opacity a symbol appear to have no clear relationship to its referent. See Lloyd and Fullar 1990; Shelestiuk 2003: 233-234; Thomas 1994.

²⁰ Shelestiuk 2003: 236.

²¹ Shelestiuk 2003: 236.

²² For instance, sound based symbolism based on the imitation of recognized audible sources (e.g. bird) attributed to a primary referent (Shelestiuk 2003: 237).

The theory long advanced by Lewis-Williams, Dowson, Pearson and others, that some geometric, linear, curvilinear, quadrilinear patterns in prehistoric art may have their origins in the entoptic phenomena visions experienced in altered state of consciousness.²³ Indeed, similarities that exist between memory retained entoptic phenomena visions and certain signs/symbols encountered in various native cultures and culturally unrelated prehistoric inventories could be quite striking (Figure 5a). How else could one explain similarities of abbreviated expressions that persisted despite geographic, ethnic or temporal divides that separate cultures and traditions (Figure 5a-b)? For instance, the similarities between the net-like patterns in Carnarvon gorge aboriginal cave paintings in Queensland-Australia (Figure 5c) and the Coso paleo-Indian net-patterns (some with superpositioned dots) of unknown date in Lake China, California (Figure 5a) could be defined by some as striking. Whatever their respective meanings they also occur in the memory retained entoptic imagery! Centuries old Chumash Paleo-Indian cave paintings with a rich repertoire of signs, symbols, and Figures with human and animal features are additional examples of such induced visions (Figures 6a-b). Australian aboriginal symbols denoting man, woman, child, waterhole, watercourse, stars or clouds, including free-floating small shapeless forms known in entoptic phenomena were culturally transmitted from generation to generation (Figure 6c). Linear patterns incised on Körtiktepe Aceramic Neolithic stone (chloride) vessels (Figure 6d) no doubt pertaining to culturally transmitted inventory of symbols are also reminiscent of graphic visions experienced in entoptic phenomena. Since scientists believe that human biological essence, and in particular the nervous system, is fundamentally the same for all mankind,²⁴ it is rather logical to assume that in induced altered states of consciousness, the human brain would produce comparable memory retained imagery. The non-aware processes of the brain and mind responsible for creating our emotional reactive self, storing the information accessible at a later time constitute the human subconscious. The processing of emotional memory, its recorded experiences, the primal reactions and encoding take place in the brain's limbic system whose activity is unconscious. In other words, emotional memory is separate and distinct from the rational processing abilities of the brain and mind. Encoding, which has no rational basis and cannot be analyzed at any time later in life, exists only as a reactive feeling memory at unconscious level. Documented effects of hallucinogens on human brain indeed suggest

²³ This theory could also explain the reason for the existence of comparable icons and ornamental patterns in the sign inventories of unrelated cultures. See, Hopman 2008; Lewis-Williams 1988; Lewis-Williams 2002a, 2002b; Lewis-Williams and Dowson 1988; Lewis-Williams and Pearson 2005.

²⁴ Hopman 2008: 1-4

ENTOPTIC PHENOMENA			SAN ROCK ART		COSO	PALAEOGRAPHIC ART			
			ENGRAVINGS	PAINTINGS		MOBILE ART		PARIETAL ART	
	A	B	C	D	E	F	G	H	I
I									
II									
III									
IV									
V									
VI									

Figure 5a



Figure 5b



Figure 5c

that rather similar forms and images experienced in the field of vision during entoptic phenomena due to the reaction of the central nervous system could have been a source of inspiration for Paleolithic artists.²⁵

Memory stored imagery and inbred notions of archetypes could reveal themselves in artistic illustrations from simple symbols to compositions of varying complexities. Continents provide an

abundance of regional and local examples. For instance, the prehistoric rock art of southern Bihar and adjoining Jharkhand in Eastern India contain from simple symbols to intricate geometric patterns encountered also in North America.²⁶

²⁵ Hopman 2008: 5; Lewis-Williams and Dawson 1988.

²⁶ In these parts of Eastern India, the prehistoric rock art tradition which continued into the early historic era initially could have been produced by shamans having seen visions while in trance. According to Prasad the images were a connection with a shamanistic spirit world and were depictions of what the shaman saw during his hallucination while seeking communication with the spirit world



Figure 6a



Figure 6b

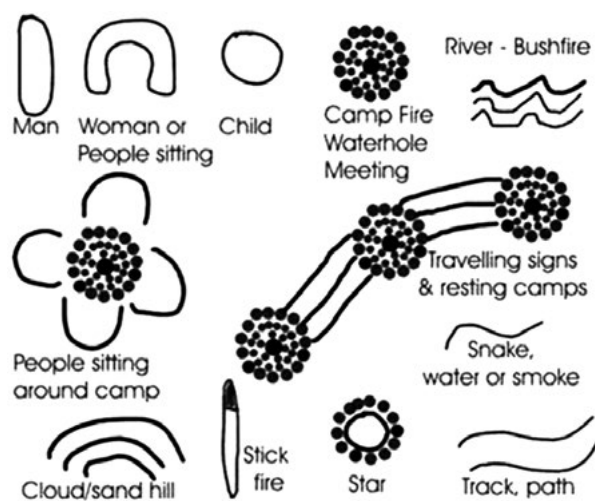


Figure 6c



Figure 6d

Neurophysiological studies in laboratories reveal three overlapping stages of altered consciousness that culminate in hallucinations and memory retained perceptions. The first stage is also known as pre-hallucination light stage of entoptic phenomena. At this stage visions include flickering and pulsating, enlarging, contracting and blending dots, zigzags, and net patterns that cannot be consciously controlled. This is followed by mental, emotional or physical condition

perhaps in order to acquire potency and success in hunting or other group activities (2015: 95, Figure 2).

that transforms visions into imagined icons. The third stage causes the hallucination of three dimensional images, which one expects to see or feel. This feeling is accompanied by the perception of being drawn into a latticed vortex with a bright light appearing at the end. In this final stage of altered consciousness animals, people, monster-like figures emerging from a visualized vortex appear as floating across animated surfaces, walls and ceilings.²⁷ This stage of hallucination

²⁷ Due to euphoric emotions memory retained forms could appear real and transform into culturally determined iconic images. See,

frequently represented in ethnographic and prehistoric art usually depicts a shaman's (e.g. San shamans) spirit leaving the body or embodying an envisioned potent animal.²⁸ These painted illustrations in many instances referred to presumed realms of spirits as conceived and described by shamans; blending individual experiences with the belief in spiritual world.²⁹ In the mind of a shaman transforming into an animal or bird meant acquiring their respective potency to enable the soul to travel into the realm of spirits fully protected.³⁰

The feeling or actual inner vision of descending into the depths of the underworld experienced by a shaman could be explained by the neurologically generated impressions of a vortex which creates sensations of darkness, constriction and, sometimes, difficulty in breathing. For the prehistoric shaman the entry into an actual deep cave in a way could have been the physical enactment of this neurophysiological experience. Presumably, the entry into a cave not only replicates the vortex, it may also induce an altered state of consciousness. The social isolation, sensory deprivation, and cold that characterize caves are important factors in the induction of trance. During the Upper Paleolithic, entry into an actual cave may therefore have been seen as virtually the same thing as entry into deep trance via the vortex. The hallucinations induced by entry into and isolation in a cave probably combined with the images already on the walls would have created a rich and animated spiritual realm. A complex link between caves and altered states seems undeniable.

In shamanism the conviction that a shaman can travel within a tiered cosmos is universal and might well have prehistoric roots. Cross-cultural research reveals universals of shamanism existing not only among hunter-gatherers but variations of it in certain socially more complex agricultural societies. They have in common the use of altered states of consciousness in community rituals that provide healing and answers to spiritual enquiries through assumed interaction with spirit world. The universals of shamanism and shamanistic healers reflect underlying biological structures. Shamanic healing manipulates the paleomammalian brain structures to produce emotional healing by evoking socio-emotional and psychodynamic process, strengthening

social identity and eliciting the body's psychoactive chemical (opioid) and immunological systems.³¹ The shared characteristic of shamans and their activities in relationship to the principal elements of shamanism, which cannot be separated from human's innate psychology, include the use of rhythmical dancing and enactment. Shamanic journey rhythms generally use drumming accompanied by monotonic chanting with repetitive sounds, or other means.³² In such induced altered state of consciousness vision quests achieved by a shaman and participating followers could be defined as a mental experience of soul journey or soul flight requiring ascending or descending from the world of the living to domains believed to be inhabited by spirits. The intended purposes for such induced soul journeys sometimes requiring the mental transformation into animals include not only a therapeutic act focusing on soul loss and recovery but also to reach the mental state of divination, prophecy, diagnosis of illnesses.³³

Certain large and deep Paleolithic caves bearing signs of ritual activities could have been perceived as likely entrances to a perceived cosmos. Performing rituals in such caves with chanting in motion while facing painted animal and human scenes in the flickering lights of torches would have accelerated the induced state of consciousness with optical illusions and individual entoptic visions that connected the shamans and through them the initiates to the spirit animals and/or the domain of the spirit ancestors.³⁴

At the core of entoptics and iconic hallucinations are said to be seven principles of perception starting with replication where visions are basic, clearly identified and retained in the memory. Next is the perception of fragmentation or the breakdown of visions into smaller components. The perception of integration is the vision created by several images being blended into a pattern, for instance a grid and a set of zig-zags. Additional perceptions experienced in the field of vision during the induced altered state of consciousness, which generate intense emotions, are superpositioning, juxtapositioning and reduplication of images.³⁵

Prehistoric societies' mental visions of the universe and interpretations of forces perceived as having supernatural or divine qualities would have included the solar system. Therefore, nature's cyclic activities culminating in renewal could have been encoded in

Clottes and Lewis-Williams 1998.

²⁸ The earliest examples of the San people rock art could be dated to distant prehistoric times. While paintings were made in shallow rock shelters, open rocks on hilltops and those on ancient glacial pavements along riverbeds were preferred for engravings. In the San religion, whose presumed purpose was to contact, manifest and influence the spiritual realm, imagery was produced not solely by shamans but by devoted artists as well. See, Guenther 1999: 70; Hoppál 2013; Lewis-Williams 2015: 90; Clottes and Lewis-Williams 1998; Whitely 2000.

²⁹ Lewis-Williams 2015: 94-95.

³⁰ The Siberian Tungus shaman believed his soul could transform into a swift, vigilant, watchful reindeer. See Malandra 1967.

³¹ Winkelman 2008: 43-46.

³² As an alternative to drumming, using a bullroarer (a flat elliptical shaped piece of wood attached to a cord that produces a whirring trance inducing drone when whirled through the air) and a rattle also provide sonic driving for the shamanic journey.

³³ Winkelman 2008: 44-45.

³⁴ Clottes and Lewis-Williams 1998; Hopman 2008; Lewis-Williams and Dowson 1988; Lewis-Williams 2002a, 2002b; Lewis-Williams and Pearce 2005.

³⁵ Lewis-Williams and Dowson 1988; Whitely 2008: 91.

comparable symbols even though their explanations could have well differed according to cultural beliefs. Symbols for verbs with complex information could have been designed differently than nouns expressed in simple forms, since expressing a dynamic event with static image required both logic and shared imagination.³⁶ While the image of a bird with spread wings depicted flying, rendering the nature of a motion would have required movement and direction emphasizing symbols such as wavy lines, spirals, whirls or arrows. Imagination which is a creative faculty of the mind becomes the mind itself when in use, and a process of the mind when used for creating, fantasizing, and forming opinion.³⁷

The association of symbols to their referents whether ingrained or acquired through cultural inheritance tend to change over generations becoming either more obscure or more expressive. Intuitive association which is a human conscious commonality deriving from knowledge and spirituality (inner spiritual perception) is considered responsible for subjective identifications of referents with particular forms and objects.³⁸

One may argue that prehistoric art in its many forms reflect the intuitive and integrative human imagination process considered to be the central faculty of creativity also responsible for the illustration of spirituality in abstract forms.³⁹ This central human faculty was already recognized centuries ago. Jalāl ad-Dīn Muhammad Rūmī, the 13th century Persian Sufi mystic, a theologian as well as poet, maintained that human intelligence consists of two types of knowledge: the acquired one through external learning, and the other knowledge, the source of unlearned creativity existing within oneself⁴⁰ Visual depictions of nature's mysterious power of renovation or rebirth no doubt illustrated oral traditions relating to sacred realms and supreme beings probably with the purpose of transmitting traditions and concepts to successive generations. In this respect, Marcel Otte's assertion that art renders the myth visible lends further support to this long held view.⁴¹

The assignment of anthropomorphic, zoomorphic or composite forms to invisible primordial ancestors and supernatural forces would have made spiritual communication with them more tangible. The resemblance of different Anatolian examples of Neolithic art with thematically corresponding ethnographic examples from indigenous societies outside Anatolia demonstrates similarities in the choice of symbols and

schematized figures that may have expressed different or partly corresponding spiritual notions.⁴²

Compositions consisting of geometric, linear, angular, and curvilinear or quadrilinear patterns, including dots, arranged in groups or in unending succession could have been examples of Neolithic mythography illustrating mythical events with psychograms, a sort of spiritual script meant for locals. Divine representations could have been adorned with sanctity identifying symbols or signs. They could have been embellished with mythograms describing a dedication formula or perhaps a popular narrative (Figures 7a-c). Therefore, the correspondence between a specific sign and its meaning (iconicity) is difficult to establish and the success of its decipherment depends on the extent of the visual clarity of the relationship to its referent.

Archaeological and ethnographic examples suggest that certain symbols preserved their forms rather than original meanings with minor adjustments during generations' long transmissions. In fact, rituals or ritual acts which involve the use and manipulation of symbols tend to change more rapidly than the symbols themselves.⁴³ For this reason alone iconography by itself cannot explain all aspects of prehistoric religions at any given time. Therefore, speculating on the meaning of a particular prehistoric symbol with the help of ethnographic parallels emphasizing form and context similarities could be very tempting but rarely verifiable. This view is shared by many archaeologists and art historians involved in the decipherment of symbols.⁴⁴ Therefore, the ethnography of visual expressions of spiritual notions could only serve as an additional perspective broadening the range of possibilities in evaluating or speculating seemingly corresponding prehistoric examples. Various ethnographic inventories of symbols tend to confirm that a particular sign would have carried more than one meaning depending on its context, culture and timeframe. Analogy based on sign form necessitates researching the source of a symbol retained in the collective memory of a cultural entity, establishing whether it was externally transmitted, borrowed or inherited. As already emphasized one may assume that comparable associative imagination could have been a contributing factor in similarities that exist in culturally unrelated art forms and styles. For instance, the urge of creating handprints existed since prehistoric times! Handprints often encountered in prehistoric and native art inventories since the Upper Paleolithic lends further weight to the thesis that forms and patterns encoded in the same neural structures are not necessarily culture exclusive and could be sensed

³⁶ Patel *et al.* 2007: 62-63.

³⁷ Perdue 2003.

³⁸ Knill 1999: 45; Knill *et al.* 2004: 87; Steiner 1963.

³⁹ Paintner 2007: 1-6; Wright 1999.

⁴⁰ Barks and Moyne 1997: 178.

⁴¹ Otte 2013.

⁴² Yakar 2010; 2011: 30-32, 66-78, 118-132; 2012.

⁴³ Whitley 2008: 99.

⁴⁴ Gadziejewski 2013: 102-124.



Figure 7a

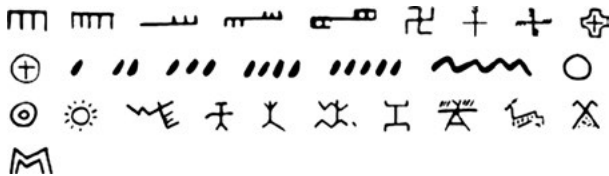


Figure 7b

or imagined by all humans with similar mindsets.⁴⁵ Reasons for creating painted handprints on house walls (Figure 8b), on rocks (Figure 8c) encountered in prehistoric and ethnographic records in different parts of the world could have varied. One may speculate that the recording of individuals' participation in a rite of passage could have been one of the many mysterious reasons. The Cuevas de las Manos in Rio Pinturas case, near Perito Moreno in Santa Cruz Province, Argentina could exemplify such an instant (Figure 8a). Some handprints could be tentatively interpreted as signs of tribal or community association with a sacred tribal site. The case of the natives of Amhem Land in Australia could be one such example. The late Grant Campbell, a noted rock art specialist, suggested that prehistoric handprints could have



Figure 8a



Figure 8b



Figure 8c

been 'a form of signature and where great numbers are found together may be identification with a tribal unit.'⁴⁶ Among the Native Americans for instance, the hand print carried a variety of meanings symbolizing human life, creative spirit, channeled energy, prayer, or ceremonial signature. Combined with a spiral motif on the palm it meant energy ascending to the sky or healing! In Patagonia, Argentina, best examples of rock art are found in the Santa Cruz province covered

⁴⁵ Gadziejewski 2013.

⁴⁶ Campbell 1965.

by rock outcrops (e.g. sandstone) and surrounded by lagoons, basins, short canyons dotted with numerous caves and rock shelters.⁴⁷ About 52 different red, black, yellow, orange and green painted motifs in the negative and positive techniques have been recorded in caves and rock shelters. Mostly painted by hunter-gatherers they are dated roughly to 11th - late 5th centuries BC. The repertory includes negative hand prints, guanaco Figures, and geometric motifs consisting of circles, meanders, zigzags, dotted circles, U-lines, parallel rows of dots, and others. In the Margen region on the other hand, the mostly engraved motifs (e.g. pecking, incision, scraping) include circles combined with lines, straight lines, meanders, three digits, dotted motifs and a few guanaco Figures. Hand negatives have also been recorded among the 47 different types of motifs.⁴⁸ The Santa Cruz and Margen examples indicate that the process of visual communication through the display of rock art imagery would have been more complex than the simple choice of shape or color of individual motifs. Their location, composition, the actual appearance of their referents or their interpretation could have produced different codes, meanings and messages.⁴⁹ The Santa Cruz and other similar regional or local examples in different continents suggest that signs and symbols when arranged in a certain manner and found in comparable contexts were used for their visual communication value. Otherwise messages conveyed or meanings carried by them or individual signs can only be speculated even when created by societies sharing socio-economic similarities.

Cross-cultural similarities involving certain signs and symbols having spiritual connotations cannot be always explained as introduced or borrowed. Similar mindsets could have created comparable rationales relating to nature's deified immortality and regeneration power expressed in relatively matching figurative or abstract imagery. Broadly speaking this could explain the existence of comparable creation myths and perceptions relating to nature's sacred or deified power. Likewise, alike mindsets seem to have been responsible for notions shared by different traditional native cultures, some of which survive to this day in 'modern' religions. One example is the belief in the magical power of fetish objects such as figurines, talismans, amulets, stamp seals and even certain types of vessels. In prehistoric times they were probably produced by specialists according to 'secret formulas' perhaps prescribed by spiritual guides, and from materials deemed appropriate to the intended purpose. The conviction that such prescribed objects invested with protective energy through the application of sacred motifs would generate protective

magical power against harm still exists in many traditional cultures, and not only among the small and isolated native groups! Naturally, one may add that not only the shape but perhaps the choice of color too would have evoked the sacred energy of particular fetish objects. In certain societies, even knotted cords sometimes worn as amulets serve as protective agents, especially during childbirth and in nuptial rites to protect the young couple.⁵⁰

Indigenous art from around the world demonstrate the way some native cultures devised highly schematized illustrations of sacred notions perhaps even mythical narratives using running or blended symbols. Among them, concentric circles, spirals and other curvilinear designs appear frequently in prehistoric and ethnographic inventories of symbols in different continents from the Americas, to Europe, Africa, and Asia including the Far East.⁵¹ Most scholars agree that the spiral motif is not just a fanciful aesthetic design but rather one also imitating forms encountered in nature (Figures 3cd; 8c; 9a-b).⁵² It could have expressed an ascending and/or descending swirling motion as in cases of water flows, whirlpools or wind and wave patterns. Running spirals could have been used to express certain spiritual notions such as the mysterious cycle of birth, life, death and rebirth (Figures 10a-d). By extension the spiral motif and its attributed movement could have symbolized various concepts such as mother goddess as nature's womb, or life generating orderly solar and lunar cycles, or in some cultures could have symbolized the universe. Spirals and running spirals occurring on Voznesenovka Neolithic decorated pottery from the Lower Amur region dated to the sixth to mid-fourth millennium BC, on Early Jomon wares from the sixth to mid-fourth millennium BC, and the Middle Jomon wares produced in the Japanese archipelago in the mid-fourth-mid-third millennium BC, or seen on Machayao and Davenkou painted wares in East China in the mid-fourth-mid-third millennium BC demonstrate the universal popularity of this motif as far as the Far East.⁵³ In the traditional Rangoli Indian folk art for instance, where many ancient symbols survive to this day, the spiral indicating a certain movement has more than one meaning. While an outward spiraling signifies an expanding movement, the inward spiraling points to an inbound action.

The circular motif or concentric circles prevalent in prehistoric art of Anatolia (e.g. Çatalhöyük and Körtiktepe), or those in the indigenous Coso Paleo Indian petroglyphs or the Paiteada ceramics of the Sican period (ca.900-1100 AD) in the Great Plaza

⁴⁷ The Margen region with its steppe environment north of Rio Santa Cruz has been also investigated thoroughly since the 19th century (Fiore and Acevedo 2015: 63).

⁴⁸ Fiore and Acevedo 2015: 63-64.

⁴⁹ Fiore and Acevedo 2015: 63-68.

⁵⁰ Eliade 1969: 111-112, notes 52-60

⁵¹ Takaki and Nueda 2007: 133.

⁵² Mackenzie 1926: 47.

⁵³ Zhushchikhovskaya and Danilova 2008.



Figure 9a



Figure 10a



Figure 9b



Figure 10b

in Peru (Figures 1a-e; 11a-d; 12a-d) may have been created by belief-systems sharing somehow similar magico-mythical perceptions. Additional examples of concentric circles, cup marks, wheel crosses, and hands on rock are known from Bronze Age (1700-500 BC) Denmark.⁵⁴ Divers types of cup marks, and concentric circles recorded in Danish sites could have symbolized birth, rebirth and fertility cycles.⁵⁵ Circular, spiral and concentric circles decorated objects could have also functioned in different cultures as good fortune bearing talismans or amulets. The indigenous Warli art provides interesting insights into the symbolism of geometric monosyllabics such as the circle, triangle and square. Circles having no beginning or end, sides or corners could have represented, among other things



Figure 10c

⁵⁴ Fielding 2015.

⁵⁵ Fielding 2015: Figure 2. It is logical to assume that such symbols could have had diverse meanings depending on context, purpose and connection to other motifs. The hand symbol for instance usually related to Bronze Age graves in Denmark could have been associated with death/burials (Fielding 2015: 58 quoting Kaul 2004: 149).



Figure 10d

unity, wholeness and infinity. Various ethnographic examples could vaguely imply that the circle motif encountered on walls or engraved on prehistoric seals may have been a protective symbol that shielded from dangers or damaging influences of supernatural forces present outside the circle.⁵⁶ Interchangeably, a circle could have symbolically prevented its encircled content from being released. In some native cultures, circles and dotted circles frequently appear as sun symbols and its celestial associates. Yashodhara Dalmia, a renowned art historian maintains that the ancient figurative paintings and geometric symbols in the rock shelters of Bhimbetka in Madhya Pradesh suggest that the members of the Warlis tribe possess an artistic tradition that dates back thousands of years.⁵⁷ In the repertoire of ancient Warlis tribal symbols the circle denotes the sun and the moon considered the very core of their existence comparable to a womb capable of countless births. Also as a symbol of a mysterious magical Figure with supernatural powers the circle was drawn on house walls in rituals celebrating birth and marriage or during a rite for the dead. Triangles, an abstract rendering of mountain peaks and treetops, often appear with a centrally placed square framing a sacred enclosure or domain. In Warlis art, the square ('chauk'/'chaukat')

⁵⁶ <http://altreligion.about.com/od/symbols/ig/Geometric-Shapes/Circles.htm>

⁵⁷ Dalmia 1988; Remedios and Dandekar 1998.



Figure 11a



Figure 11b



Figure 11c



Figure 11d



Figure 12a

with its two types referred to as *Devchauk* and *Lagnachauk* constitutes the central motif in ritual paintings. The ancient mother goddess *Palaghata*, symbolizing fertility occupies interior of a *Devchauk*. Significantly, male gods are unusual among the Warli, and are frequently related to spirits which have taken human shape.⁵⁸ Another long surviving symbol related to spiritual concepts such as rebirth or the life cycle is the netlike 'Eternal Knot' or 'Endless Knot' which is a symmetric design having no beginning or end! This closed ornamental design with overlapping intertwined lines could have a right-angled or rounded contour. The endless looping is meant to confuse evil spirits preventing them from accessing homes and temples. In Tibetan Buddhism it also symbolizes Samsara, the endless cycle of birth, life, death and rebirth/reincarnation (Figure 13a). Despite its culturally distinct design variations the 'Eternal Knot' seems to have been a symbolic expression of comparable beliefs in different cultures mainly or also relating to the immortal nature of the universe. In Tibetan Buddhism this symbol represents a number of interrelated notions such as eternal act of binding, the interdependence of all phenomena, and all things in the universe. As well as Buddha's endless wisdom and compassion, or Samsara, the endless cycle of birth, life, death and rebirth. The 'Endless knot' presumably originating in Tibet spread around the world, China in particular. Many travelling monks who ended up in Ireland were along the way influenced by the knot-work styles from the Middle Eastern Syrian and Coptic manuscripts and incorporated the design into their own holly manuscripts.⁵⁹ The proto-type of Tibetan 'Endless Knot' originally a motif from India depicted two intertwined snakes (*naga*), which symbolized the union



Figure 12b



Figure 12c

⁵⁸ Tribhuwan and Finkenauer 2003: 13-15.

⁵⁹ Takeyama-Losch 2000.

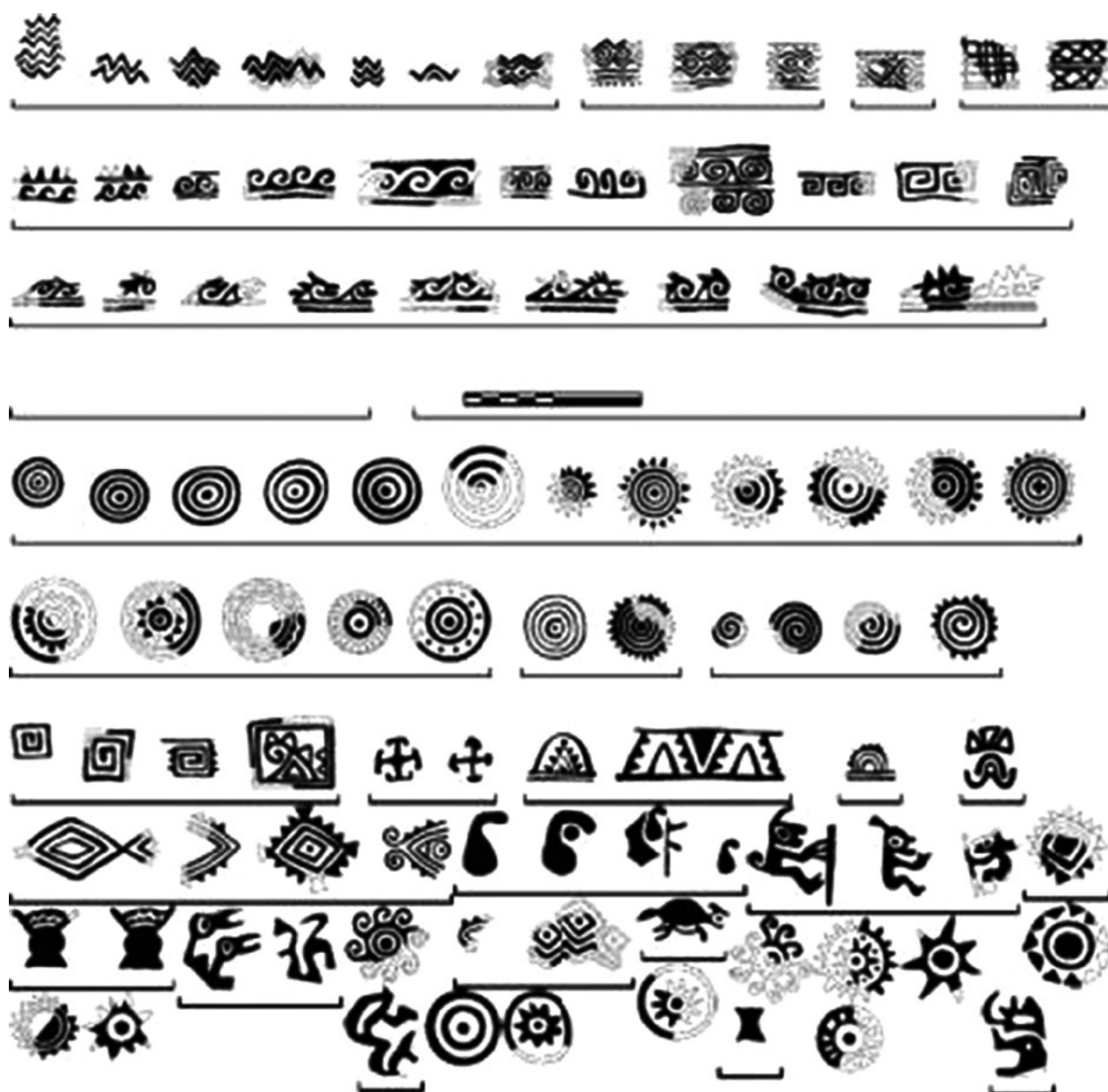


Figure 12d

of opposite forces. Snakes represented among other things the underworld waters, renewal because of the shedding of the outer skin, and resurrection due to the fact that snakes hibernate and then 'return to life'. Ancient Egypt had a much older and simpler version of the 'Endless Knot' which is believed to be the *ankh* symbol of life, or the Isis knot symbolizing immortality. Depending on the culturally oriented beliefs as well as favorable or unfavorable emotional connotations, the 'Endless Knot' was also believed in some oriental cultures to possess contrasting protective and destructive magical qualities. Obviously it was valued as a protector of a newborn's life securing the umbilical cord, but at same time feared as harming life when in the umbilical

cord of a fetus in the mother's womb. In the distant past too knots as well as nets could have been perceived as possessing protective and harming qualities. For the Chinese, the 'Endless Knot' motif symbolizes longevity, binding the good, protecting from bewitchment. In Hinduism, it is a symbol of immortality, infinity, fertility. In early Islam the 'Eternal' or 'Endless Knot' design symbolized protection. Considering the long history of this motif one wonders about the symbolism of the intricate linear designs somehow reminiscent of the 'Endless Knot' on certain Anatolian Neolithic stamp seals (Figures 13b-c).



Figure 13a



Figure 13b

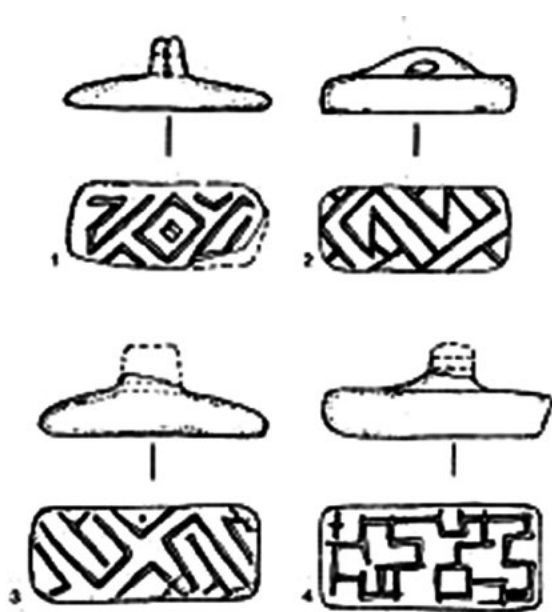


Figure 13c

In summing up, one could not ignore the ethnology supported biogenetic approaches to ritual and human evolutionary psychology in explaining the biological nature of shamanism which in turn could interpret prehistoric religious behavior, as well as spiritualism and its artistic expressions.⁶⁰ There is reason to believe that encoding spiritual concepts seem to be a universal human trait embedded in the subconscious and partly responsible for the creation of comparable artistic expressions ever since prehistory.

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⁶⁰ Winkelman 2008: 62.

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The Early Bronze Age Shrine of Mets Sepasar

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Abstract: The Early Bronze Age site of Mets Sepasar (Ashotsk plateau, Armenia) is one of the mountain settlements of the Kura-Araxes culture. The excavations carried there revealed the complete layout of a religious structure built in the centre of the mountain top. By the technique of manufacturing, forms, and decoration most of the earthenware found in Mets Sepasar typically belonged to Kura-Araxes II – Karnut-Shengavit culture. Chronological parallels to this shrine are the temples of Khirbet-Kerak (middle of the 3rd millennium BC) and Mokhrablur (3000-2600 BC).

Among the interesting finds are seven skulls of the sacrificed dog-wolves. All of the wolf skulls had no lower jaws. Severed lower jaws were found in different parts of the shrine floor. The wolves had been presumably sacrificed out of the building as only the wolf heads were left in the shrine.

The ritual sacrifice of the wolves (with all of its components: number, form and place) is an archaeological narrative of the rites performed. The beliefs connected with the cult of wolf come from the Indo-European tribes where the gods – guardians of the tribal community had been firstly the elements and the mightiest wild animals distributed at the given geographic area – as the wolf here. In the mythological perception of both Indo-European and other peoples the wolf was basically associated with the tribal totem and combat leader or with the cult of the god of war.

The artefacts found at the shrine in situ suggested that it was abandoned quite of a sudden during or immediately after the ritual, then the sacred place was tabooed and thus left intact.

Keywords: Early Bronze Age, Kura-Araxes culture, Mets Sepasar, shrine, worshipping, wolves, sacrifice

Places of worship appear only on certain stages of the cultural development when the necessity arises to raise the beliefs to the level of rite, to shape all of this and, naturally, to ensure a place for deities and build a home of god.¹ The vast majority of such earliest temples such as Çatal-Hüyük in southern Turkey (7th-6th millennia BC) did not differ by their layout or building technique from usual one room dwellings excavated in their neighbourhood.² In other Asian regions (south of Central Asia and Afghanistan, Palestine and Asia Minor), where settlements with sedentary economy had been already existing since the 7th-6th millennia BC, the architectural features of the structures that would suggest some special ritual assignment appeared only in the Early Bronze Age (Late Neolithic in Palestine).³ However, archaeologically they are hardly discernible except in regions where their existence is corroborated by written sources. Appearance of the first temples in the Neolithic Mesopotamia (Eridu, Ubeid culture, 6th-5th millennia BC) is usually attributed to specific conditions of the culture development. The earliest shrines in the South Caucasus, such as a two-room shrine with a round oven in Imiris-Gora⁴ date from the 5th millennium BC. Along with the appearance of religious structures shaped was a set of canons, which had been unchanged and abided for centuries. The

architecture of the Kura-Araxes culture stemming from the Neolithic and Eneolithic periods developed to working out certain construction principles. As a rule the religious structures of the 3rd millennium BC had been built on the highest point, in the centre of the mountain settlements descending by terraces down the slope. They were separated from other structures and dwellings and differed by interior. Sanctuaries are met in highly developed farming settlements of the South Caucasus – Amiranis-Gora⁵ and Kvatskhelebi.⁶ The shrine of Mets Sepasar discussed in this article followed the same tradition.

Mounts Large (Arm. *mec*) and Small (*pok'r*) Sepasar are situated in the north-west of the Ashotsk plateau (see the map) in the centre on a plain surrounded by mountains (Figure 1). The mounts and two villages of the same name on their southern slopes are divided by the river Akhuryan. There are shrines on both summits. Shrine 'Dari Surb' – on the top of Mets Sepasar (41°03'12"N, 43°49'00"E, absolute height – 2081m) is a Christian sanctuary representing a sepulchre covered by two slabs with a stele put close to the eastern lateral slab. It is enclosed into a chapel oriented from east to west.

As typical for Early Bronze Age settlements of the Armenian Highland that of Mets Sepasar (Figure 2)

¹ Antonova 1990: 50.

² Kushnareva 1977: 43.

³ Antonova 1990: 50.

⁴ Javakhashvili 1970: 60, Plate 9; Kushnareva 1977: 41.

⁵ Chubinishvili 1963: 94-103.

⁶ Kushnareva 1977: 43, 62.



Figure 1

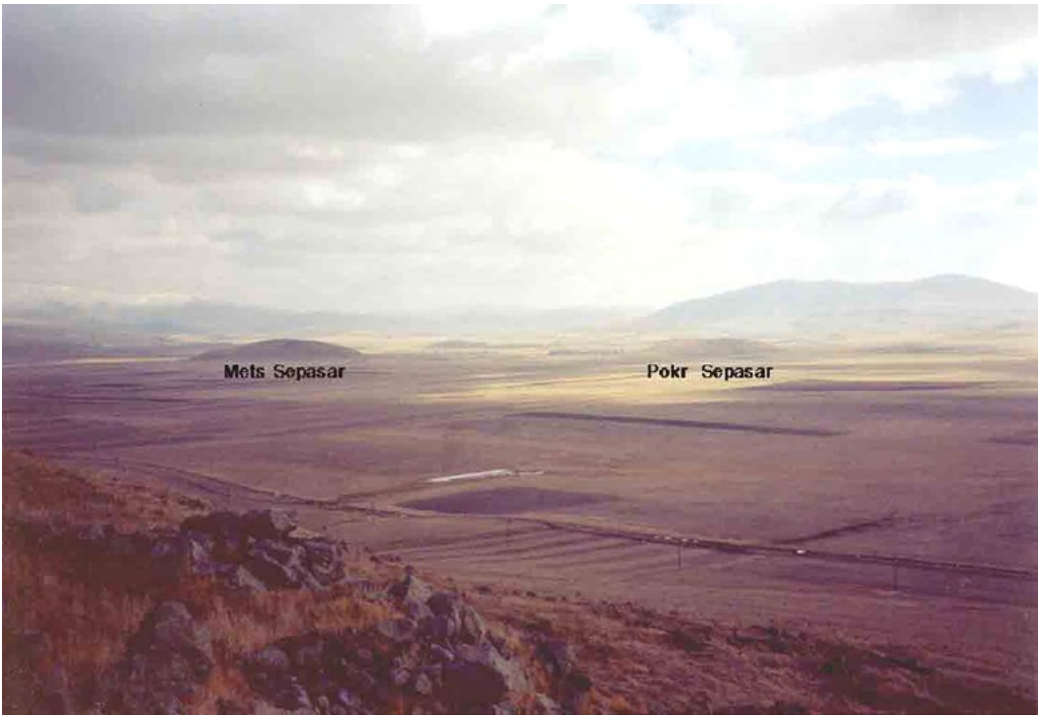


Figure 2

was situated on the smooth summit of the volcanic mount closer to its northern slope domineering over the environment with its fertile fields and water resources providing favourable opportunities both for stock breeding and farming. The dwellings surrounding the shrine were descending by bowl-shaped terraces situated 1-1.8m below each other. Unfortunately in the 1980s the western and partly the eastern sides of the settlement where the shrine was located had been altogether destroyed as a result of building a reservoir for irrigation needs. Exploration works carried here in 1998 and regular excavations starting in 2004 showed that the settlement stretched down the northern and western slopes.⁷ The bottom of the Early Bronze Age layer of the site reached the red volcanic bedrock (pumice) while the upper layer contained the prop walls of the late medieval structures. The depth of the layer fluctuated between 1.5-1.7m from the surface, thickness – 40-200cm. Excavations of the building horizon of this layer revealed the remains of rectangular basalt structures and various artefacts of material culture and worship.

The two mounts towering over the plain, the river, a spring at the foothill, vast alpine meadows nearby were sufficient to consider the area as a peculiar ritual environment and therefore building a shrine there. A mount or elevation was a necessary pre-requisite for choosing place for the earliest religious structures. Mounts were the abodes of gods.

The excavations of 2004-2007 seasons revealed the complete layout of a religious structure (Figures 3-4) built in the centre of the mountain top from east to west. It was edged by a natural rock rising like a wall from the first terrace of the northern slope. The shrine (Figure 5) was rectangular, oriented to the four cardinals – from north-west to southeast (5.5m × 4.7m). Some of the walls were preserved to the height of 1-1.2m. The external masonry of the northern and eastern walls was of grey basalt, while from the inside the walls were laid by almost similar small roundish stones of the bedrock reddish scoria (pumice, Figure 6, section). The internal surface of the northern wall – the only one preserved to its full length, was slightly bent outward though it was solidly fastened to the outer basalt masonry standing on the continent. The external masonry of this wall was laid of a larger basalt blocks. The southern wall had similar pumice masonry but instead of the outer masonry it rested on a natural cut of 1.5m deep basalt rock. While laying the foundations for medieval houses half of the southern wall up to its crossing with the western one was destroyed. The western wall with a 60cm wide doorway was fully laid of grey basalt and differed from others also by its masonry and thickness (73cm). Its fastening to the angle of the northern wall



Figure 3

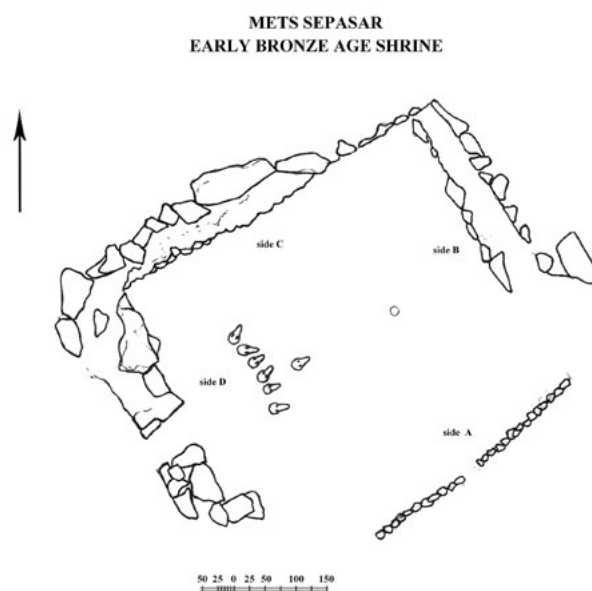


Figure 4

was well preserved. The entrance opened to the street leading down the hill from south to north.

The masonry interrupted at 40cm from the southern corner of the eastern wall. The internal masonry of the northern and eastern walls was slightly bent. The bending of the northern wall was even more obvious. Due to it the walls seemed to be concave. On the adobe floor of the shrine we unclosed a foundation of another wall built of the same stone with similar masonry that

⁷ Yeganyan 2005: 5.



Figure 5

METS SEPASAR
the shrine, cut set

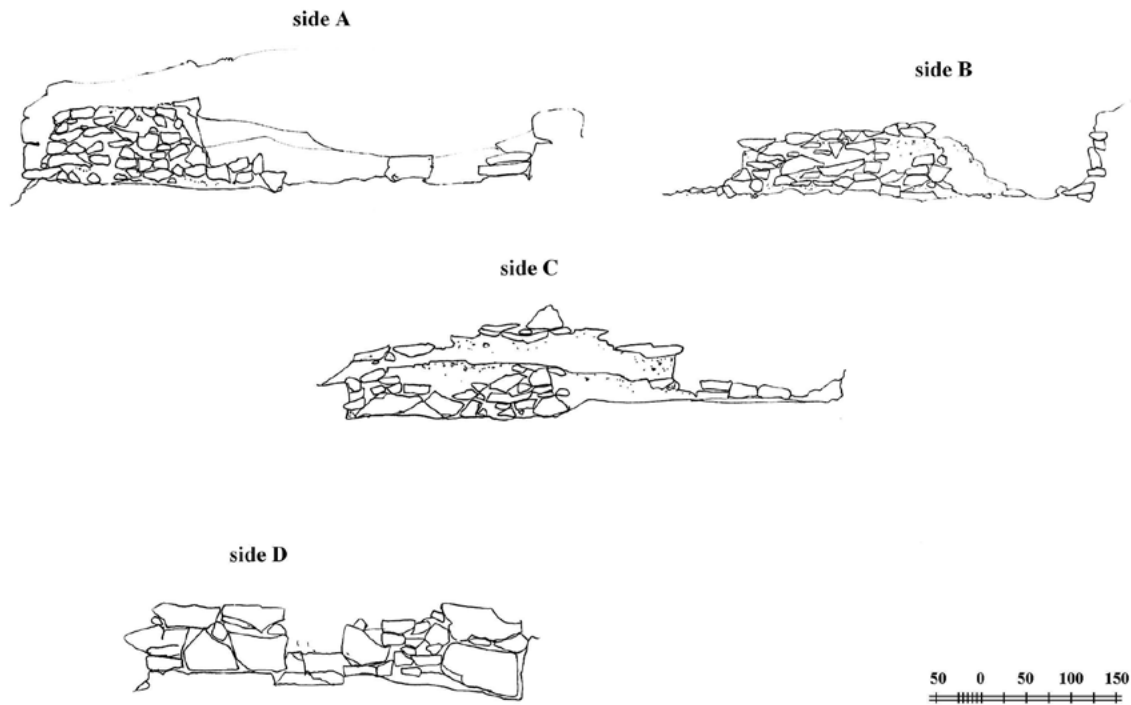


Figure 6

went along at 50cm from the eastern wall and was a foundation for the platform wall. Presumably there was an altar, ruined while laying the foundations of the medieval structures. There was no archaeological evidence of the type of roofing or lighting the shrine though by analogy with the architectural solutions of similar contemporaneous structures the shrine should have even roofing with an aperture for light and removing the smoke. The opening in the temple roof was for seeing the heaven.⁸

The central position of the shrine at Mets Sepasar presumes that the common place of worship of the entire community was located in the geographical centre of the settlement. The planning and construction peculiarities of the shrine (direction from east to west, entrance from the west, position of the vessel-hearth) testify to the existence and observance of certain canonized regulations for places of worship.

The adobe floor of the shrine was covered by a layer of ground red pumice taken from the bedrock. The floors made of tramped clay layer are met in Shengavit,⁹ Ozni¹⁰ and Harich.¹¹ The adobe floors of the structures at Amiranis-Gora¹² also have a slight bias. A vessel-hearth (diam. – 18cm) unclosed within the floor in the eastern part of the shrine (Figure 7) near its eastern wall was surrounded by a 25-30cm thick layer of ash and seven pieces of dacite covered by reddish patina. Dacite stones were laid side-by-side to form an arc constituting 1/4 of a circle with the vessel-hearth inside. The base of the vessel used as a hearth was missing. It was put upside-down probably to communicate with the mother-earth while pouring libations through its neck. Inside it was coated by a thin layer of clay (black body of the vessel could be seen where the coating was gone) that continued on the surface of the floor (diam. – 60cm) then finally fused with the cob work of a little salient floor smoothed by reddish ground pumice. Brushwood burnt in the vessel-hearth was mixed with black viscous and sticky ashes. There was a phallus near the hearth (Figure 7).

Such vessel-shaped hearths are known from Amiranis-Gora, Abanoskhni, Kültepe and Baba-Dervish.¹³ In Norabats the upper part of the vessel was put under the floor and the base was filled by sand¹⁴ while in Harich an oval chalice without a base was used as a hearth.¹⁵



Figure 7

Under the western wall we found a boat-shaped millstone also covered by reddish patina. The tramped up adobe reddish floor was well preserved suggesting either non permanent usage or renovation after each ceremony, or usage by the person(s) entitled to perform the rites.

West of the vessel-hearth isolated by the arc of red stones, at 70cm from the western wall we uncovered seven skulls of the sacrificed dog-wolves. Six of them were put on the floor side by side amid the pile of ashes, burnt brushwood and various fragments of Early Bronze earthenware while the seventh skull was flatly put on a small slab covering the fragments of different vessels piled on two other small slabs. On the pile of fragmented ware we found a half of an evenly cut black cup (with red lining) with a bone needle and a round flat stone button perforated in the centre inside. All of the wolf skulls had no lower jaws.¹⁶ Severed lower jaws were found in different parts of the shrine floor. The wolves had been presumably sacrificed out of the building as only the wolf heads were left in the shrine (Figure 8).

Closer to the southern wall in the western part of the shrine we found six wholesome cups put side by side and covered by a large vessel turned upside down (Figure 9). A little further in the southeast corner, just on the bedrock within the thick layer of the floor we unclosed the fragments of large flat pans with wide bases and straight walls and other ware laid on each other as well as a pestle and polishers. On the bedrock within the floor we found a bronze ring and a pin (Figure 10), a seashell with a hole for wearing (Plate I/14), polishers and shellfish. It is worth mentioning that the exploring shaft made in the northwest corner

⁸ Zubov and Petrovskij 1940: 190.

⁹ Khanzadyan 1967: 10; Simonyan 2013: 18.

¹⁰ Zhorzhikashvili and Gogadze 1974: 8.

¹¹ Areshian and Ghafadaryan 1996: 61; Kushnareva 1977: 42.

¹² Areshian and Ghafadaryan 1996: 61; Kushnareva 1977: 42.

¹³ Abibulayev 1980: 94; Gnuni 2004: 207; Javakhashvili 1970: 152; Narimanov 1964, Table 1.

¹⁴ Areshian 1980: 423.

¹⁵ Khachatryan 1985: 72.

¹⁶ Osteological material was examined by Nina Manaseryan, Dr. of Biology, Institute of Zoology NAS RA and archaeozoologists, Prof. Hans-Peter and Margaret Uerpmanns, Tübingen University.



Figure 8



Figure 9

of the shrine showed that the clay layer of the floor here was 30cm deep. The section with the vessel-hearth from its opening to the virgin soil was of the same depth. Regular renovations of the floor are evident also in Shengavit,¹⁷ Guegharot¹⁸ and other Early Bronze Age sites. The temple was similar to a 'household economy' belonging just to gods and not to people.¹⁹ Being

¹⁷ Simonyan 2013: 18.

¹⁸ Badaljan 2008: 51.

¹⁹ Diakonoff 1983: 174.



Figure 10

sanctified by fire and the sacrificial blood all artefacts used in the rite were deemed to belong to the god and as such - left in his house. This is also true in respect of the offerings preserved both on the floor and under the floor of the shrine.

The artefacts found at the shrine in situ suggested that it was abandoned quite of a sudden during or immediately after the ritual, then the sacred place was tabooed and thus left intact.

The earthenware found at the shrine of Mets Sepasar is represented by 34.5–50cm high S-shaped (three-part) black burnished large vessels with reddish unpolished interior, wide opening (diam. – 34.5-48 cm), small rim slightly bent backwards, short neck, small flat base and gable body (Plate II/7-9; Plate III/1-2). One side of the section between the pot handles was decorated by incised stylized geometrical ornaments consisting of intermitting spirals and concentric circles. The section under the neck had a deep linear ornament. The other type of the pots had longer necks, rounded bodies, and stylized triangular ram-head (or beak-shaped as it is called in special literature) false handles. In addition to similar stylized ornaments made on the obverse of the protuberant part of the body they had quadrangular and axe-shaped relief ornaments incised on their necks. One of the large vessels was left unpolished and rough from the middle of its body to the base. Its large sizes (opening diam. – 48cm, H. – 50cm), volume and

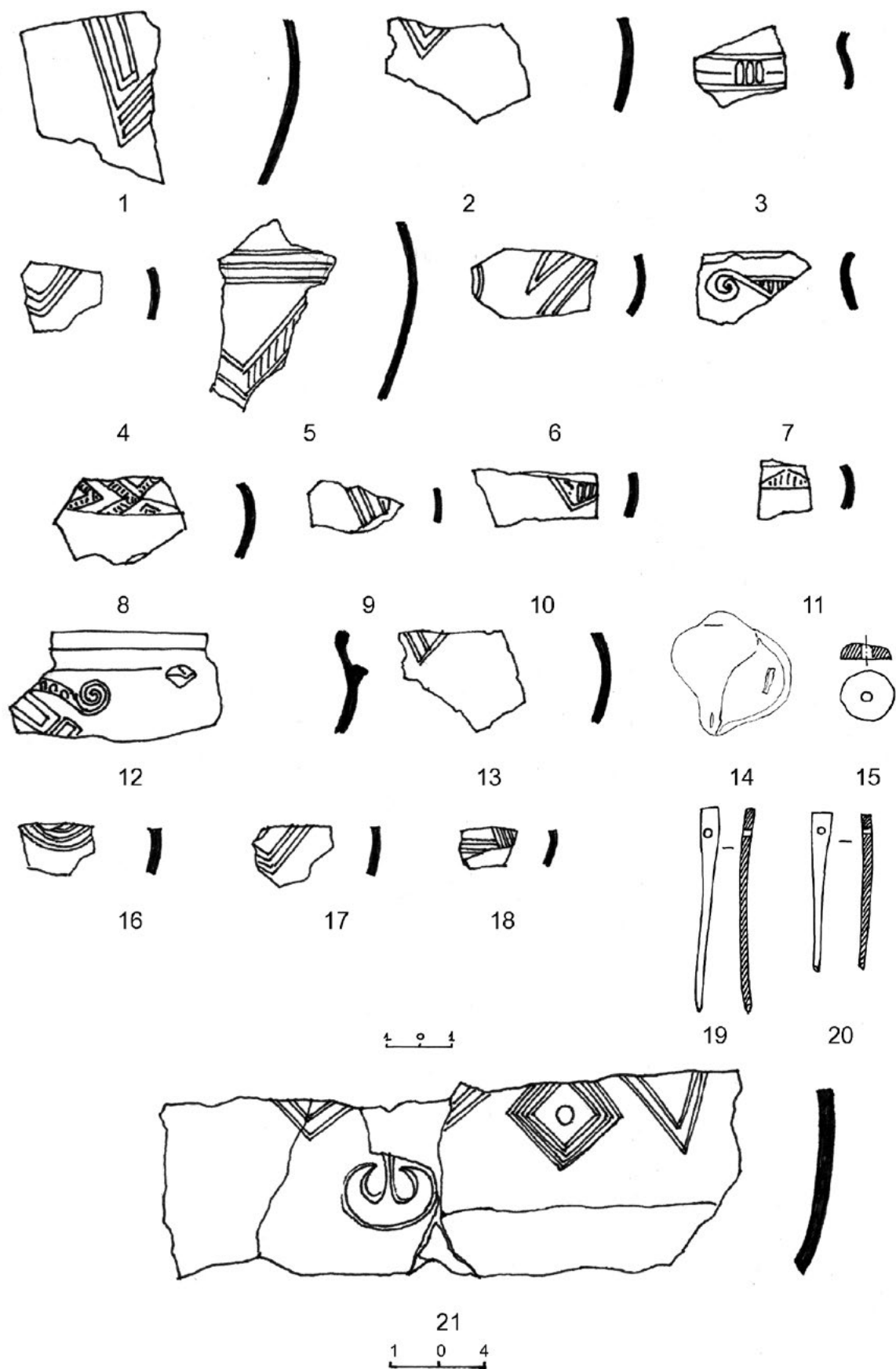


Plate 1

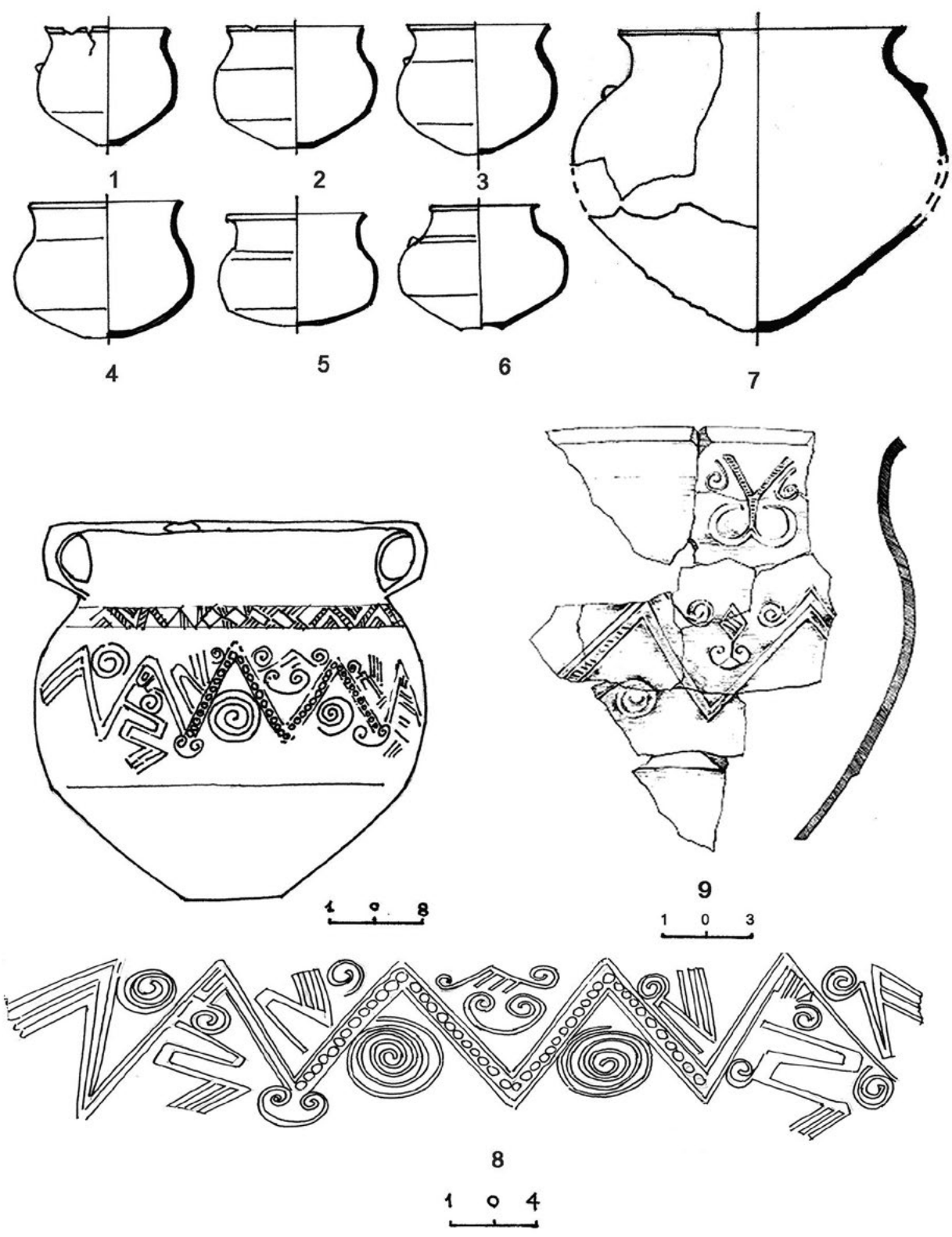


Plate 2

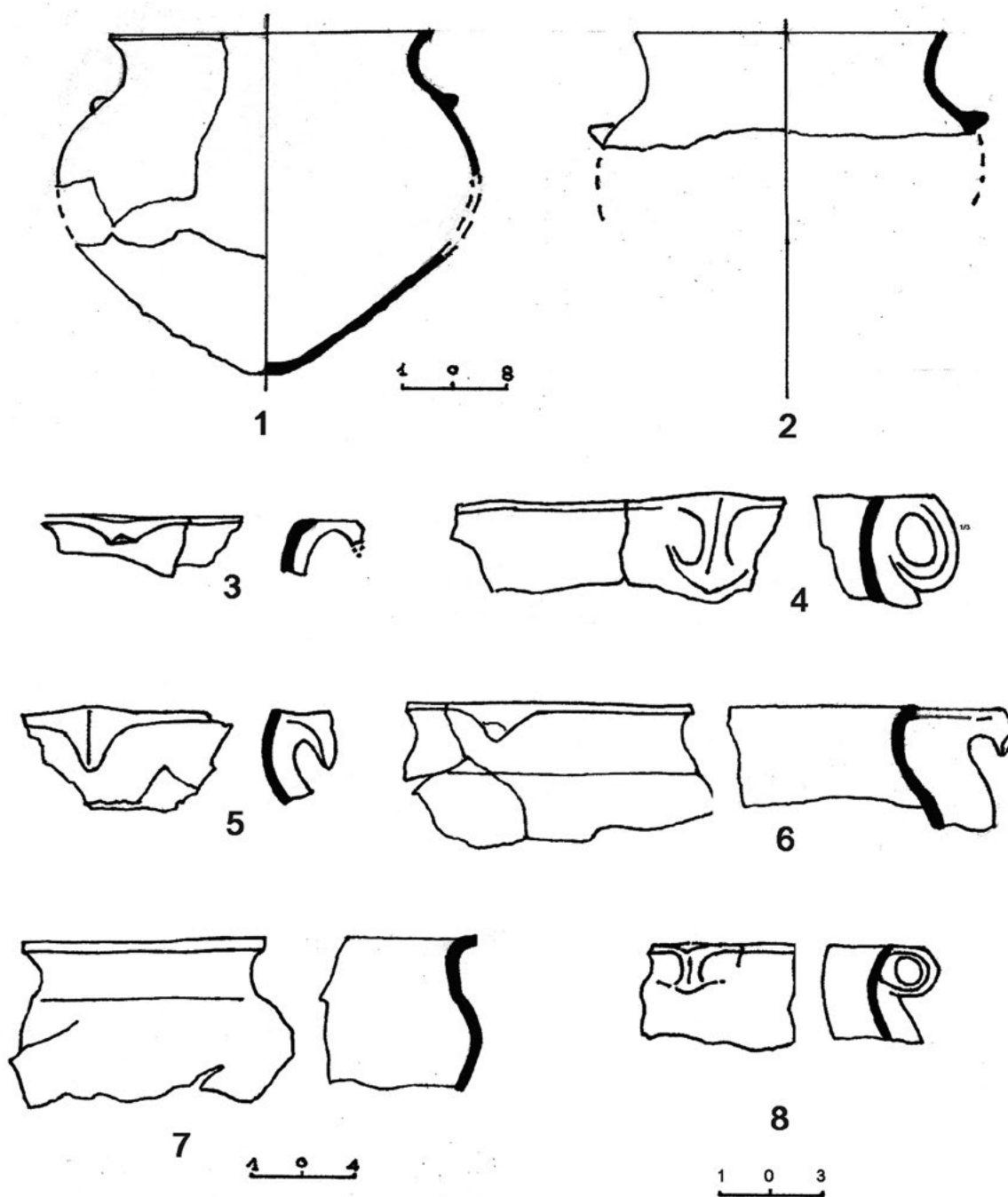


Plate 3

specifically the sharp narrowing from its body to the bottom along with a very small base (diam. – 8.5cm) presumed that it was fixed in the ground. That is why its lower part was not polished as the area of friction increased by the roughness ensured stronger fixation. Only one side of this fixed vessel was decorated and maybe the formula of the ritual performance was encrypted in its ornaments. The forms and ornaments of the vessels have their parallels in a number of Armenian sites: Kosi Tchoter,²⁰ Shengavit,²¹ Garni,²² Karnut,²³ and Haritch.²⁴

S-shaped black burnished chalices (H. – 9.5-12.5cm, Plate II/1-6), six of them wholesome, had reddish or grey interior, a thin rim turned backwards, wide opening (diam. 9.5-13cm), short neck and protuberant body sharply sloping to the small base (diam. 2.5-3.5cm). Two of these cups had a small false protruded handle on the most protuberant part of the body and stylized bird ornaments on their bodies. Thin shard cups of this type have been unearthed at almost all sites of the Armenian Highland and the area of their distribution is very wide reaching Trialeti in the north and Geoy-Tepe and Khirbet-Kerak²⁵ in the south. In nowadays Armenia they are also known from Ketì,²⁶ Garni²⁷ and other sites.

Most interesting among the finds were the pans for baking bread (Plate 4/1-11), which may be classified to three groups. The first group was represented by thin shard (0.5-0.6cm thick), delicate, well slipped and burnished pans (W. – 35cm) with walls bent outward, one side of which has a back-folded lip. The second group includes large (W. – about 60cm) yellowish or pink pans with 1.3-2cm thick walls, made of fine paste. Their surface is smoothed, one of them also stained, the walls are high (10-13cm) and straight. Height of the walls in their opened part (about 35cm long) is only 4.5cm, which is slightly above the base. There are traces of fire on their inside and outside and traces of fingers pulled along their walls. The third group consists of the pans with walls indented at some points. A stucco ornament in the shape of a quadrangular truncated pyramid was preserved on the indented part of one of the pans. The other pan had rectangular stucco parts to enhance moving. There are no traces of fire. The sizes and thin shard of these pans suggest that they were in fixed position. This type of pans is met at the Early Bronze sites of Shengavit and Mokhrablur (Kultepe, Nakhchivan), as well as in the sites of North Caucasus²⁸

dated to the 3rd millennium BC.²⁹ Two fragments of Early Bronze pans of this type though not so delicate were found in Ketì³⁰ and in Haritch.³¹

The forms and decoration of the earthenware are characteristic of the 3rd millennium BC culture of Armenian Highland and have numerous parallels in the contemporaneous sites of Armenia.

Even though the wholesome vessels found at the shrine of Mets Sepasar were empty, based on such parallels as Metsamor,³² we may assume that product offers should have been kept there. That is why we grouped the earthenware found there by its assignment: the first group consisted of vessels used and also sacrificed, i.e. broken, and the second – of vessels that had been permanently kept at the shrine to use their contents for performing the ritual. The variety of vessels unclosed here presumed the performance of rites connected with offering, libation and closing or opening of the vessels.³³

Many of the artefacts offered to the shrine (such as a bone needle, a stone buckle-button, a shellfish and a seashell with a hole for hanging, a pin made of bronze wire with a twisted pinhead, see Plate V) had been in use for centuries without any changes and as such are unfit for accurate dating. Thus bronze pins with twisted pinheads were widespread since the 4th-3rd millennia BC until the beginning of the 2nd millennium BC³⁴ and were found in the contemporaneous settlements of Kultepe,³⁵ Shengavit³⁶ and Amiranis-Gora.³⁷

By the technique of manufacturing, forms, and decoration most of the earthenware typically belonged to Kura-Araxes II – Karnut-Shengavit culture. By its architectural and building features the shrine of Mets Sepasar along with its ceramics, other finds and radio-carbon data belonged in accordance with the last division to phases to the 28th-25th centuries BC. Chronological parallels to this shrine are the temples of Khirbet-Kerak (middle of the 3rd millennium BC)³⁸ and Mokhrablur (3000-2600 BC),³⁹ as well as the religious structures of Dvin,⁴⁰ Haritch⁴¹ and Shirakavan.⁴²

²⁰ Devedjyan 2001: 28.

²¹ Sardaryan 1967: 176-179, Plates L-LI.

²² Khanzadyan 1979: 46-48.

²³ Badalyan 1984: 232, Figures 2/12, 18-20.

²⁴ Khachatryan 1985: 63-64, Figures 18-21.

²⁵ Khanzadyan 1967: 63.

²⁶ Petrosyan 1989, Table 13/7.

²⁷ Khanzadyan 1969: 54, Figure 50.

²⁸ Khanzadyan 1967, Table XIII.

²⁹ Torosyan 1976: 83.

³⁰ Petrosyan 1989: 32, Table 19/8-9.

³¹ Khachatryan 1985: 68, Figure 29.

³² Khanzadyan *et al.* 1973: 123.

³³ Yeganyan 2013: 41-45.

³⁴ Kushnareva and Chubinishvili 1970: 127-128.

³⁵ Kushnareva and Chubinishvili 1970, Figures 43/18-19.

³⁶ Kushnareva and Chubinishvili 1970, Figures 43/16-17, 20.

³⁷ Chubinishvili 1963, Figure 14/1.

³⁸ Areshian and Ghafadaryan 1996: 66.

³⁹ Areshian and Kafadaryan 1973: 443; 1975: 397-403; Kushnareva 1977: 41.

⁴⁰ Kocharyan 2001: 289; Kushnareva 1977: 7-10, 41-42.

⁴¹ Khachatryan 1985: 75; Kushnareva 1977: 42.

⁴² Areshian and Ghafadaryan 1996: 59.

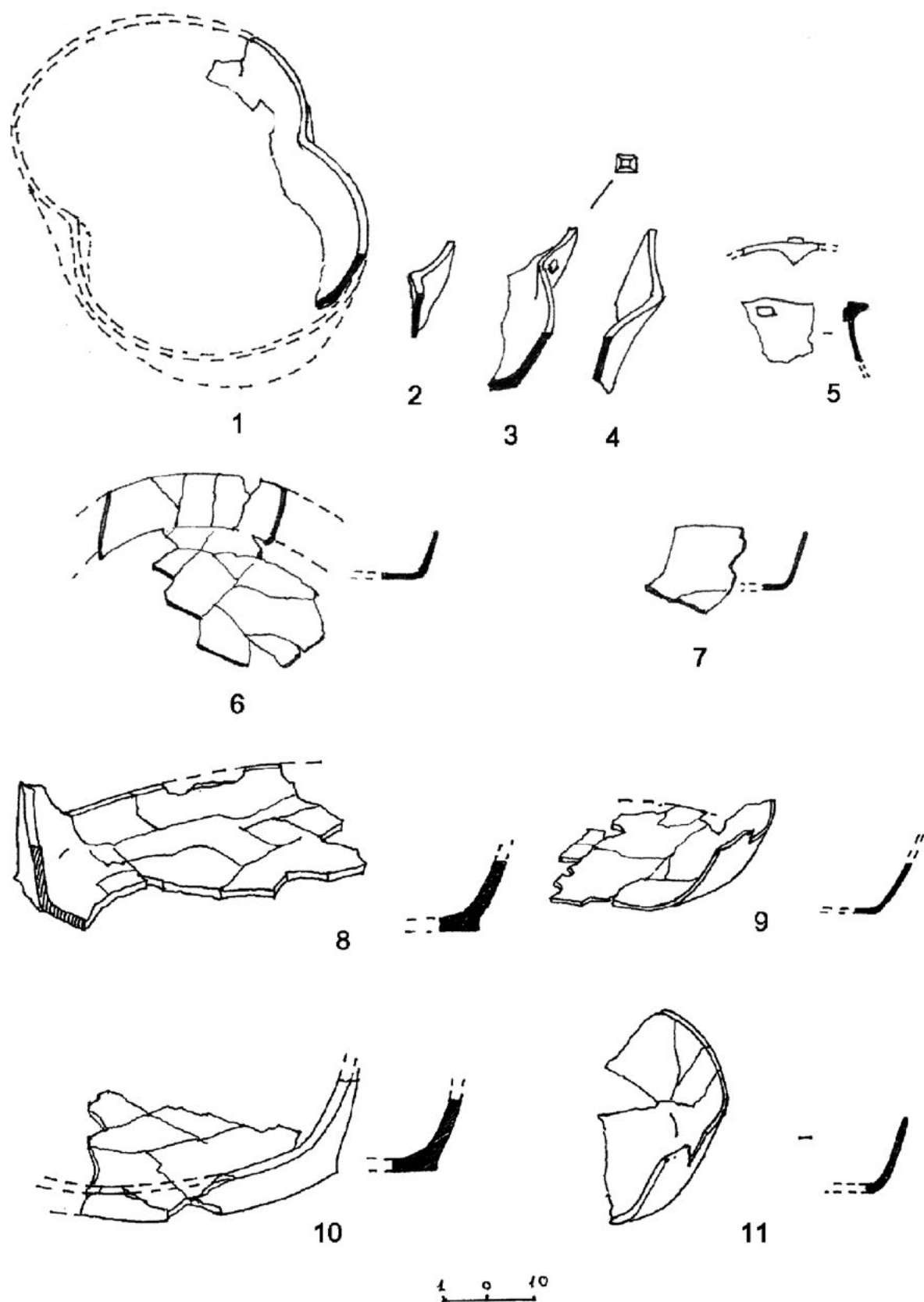


Plate 4

Important for investigating the issues of spiritual culture are even the smallest details beginning with the choice of place for the shrine, its exterior and interior design, colour of the stone and ending with the finds unclosed there. The ritual assignment of this structure is additionally emphasized by saturated red colour of its interior. Three red walls and a red stone arc on the reddish floor to the west of the hearth, a millstone under the wall also covered by reddish patina... The tradition is very old. The adobe floors of the structures in the seventh-millennium Jericho as well as in Zagros⁴³ had been painted red or flesh-coloured. The walls and floors of the dwellings at the Late Neolithic settlement of Yanik-Tepe were painted by red ochre,⁴⁴ likewise the walls in Alikemek-Tepesi (an artificial mound and settlement in Mughan steppe south of the Kura River) were plastered by clay and painted red⁴⁵ as well as the walls and floors of the dwellings unearthed in the Shengavit-type cultural layer of the multilayer settlement of Gharakopek-Tepe in the Karabakh steppe zone.⁴⁶

Red was associated with the west, netherworld and its god or lord.⁴⁷ The floor and hearth of the sanctuary at Hacilar were painted by red pigment.⁴⁸ Yama – the god of death was depicted in red clothes.⁴⁹ Red symbolized the eternal life through death ensuring both death and life. The fire was also associated with red. Thick layer of ash and, specifically, the pieces of charcoal show that fire had been accompanying the entire ceremony. Reflecting on the floor and walls its blazes intensified the red colouring of the interior. Probably the ritual was accompanied by libation including presumably wolf blood and the vessel-hearth was dug into the floor so that any liquid poured on the floor should inevitably flow to its opening, i.e. the final purpose was communicating with the earth. It should be also noted that while east was connected with light, warmth, life, happiness and glory the west according to Indo-European beliefs associated with the darkness, cold and death therefore it is worth mentioning that rituals were performed in the western part of the shrine and its entrance was made in the western wall.

The form and interior of the shrine, wolf skulls and other artefacts found in situ, sacred ashes left at the hearth separated the temple within the general context of the settlement layout showing its special function connected with the cult. The choice of the central position of the shrine, its form and orientation towards the cardinals, building materials, way of construction,

place of the entrance and interior design – all of these details were of extreme importance. The choice of the place of worship, its form and interior are in harmony with the cult of the wolf-god. In mythological perception the cave was an asylum and hiding place, a symbol of the Universe and a shrine. The cave-shrine is a model of the space, and the artefacts in it are the symbols of the cosmic elements.⁵⁰ The shrine was intended to look like a cave. The ritual context is contained in the species of predators sacrificed, their number and other details connected with the rite.

The ritual sacrifice of the wolves (with all of its components: number, form and place) is an archaeological narrative of the rites performed. The oldest traces of the wolf worship are found in the Stone Age and judging by the ritual burials of the wolves or putting their skulls on display that cult played an important role at the given period.⁵¹ Indications of the mystical nature of the wolves are found at the Neanderthal caves.⁵² There is a Paleolithic painting of a bear with a wolf head and bison tail⁵³ maybe representing some deity of the Stone Age. Archaeologically the fossils of wolves have been found at a number of sites dating from the 8th-7th millennia BC in a very vast region including Near East, Thessaly in continental Greece, east of Asia Minor, Iranian plateau, Palestine, several regions of the northern Europe and England.⁵⁴

Until findings at Mets Sepasar the earliest archaeological evidence of the cult of wolf in Armenia was a silver chalice of the Middle Bronze Age from the Karashamb necropolis connected with the burial rite through cremation (22nd-21st centuries BC). Depicted on the first belt under the lip of the chalice was a hunter chasing a lion, leopard and a wolf; then – a commander wearing a wolf tail and bodies of beheaded warriors with wolf tails on being accompanied to the Netherworld by lion-headed eagle Anzu(d).⁵⁵ Wolves were depicted on a hydria from Nerkin Getashen dating from the first quarter of the 2nd millennium BC.⁵⁶ Wolf (or wolf and dog) figurines stand out among many other statuettes found at the burials of the Late Bronze and the first phase of Early Iron Ages. There is another chase scene on the stone bas-relief of Shamiram.⁵⁷ Wolf figurines dating from the 6th-5th centuries BC had been also found at Ayrum.⁵⁸ The echo of the wolf cult is preserved also in the Armenian miniature, and the quintessence

⁴³ Masson 1983a: 51; 1983b: 58.

⁴⁴ Areshian and Ghafadaryan 1996: 22.

⁴⁵ Areshian and Ghafadaryan 1996: 31.

⁴⁶ Areshian and Ghafadaryan 1996: 46.

⁴⁷ Golan 1993: 44.

⁴⁸ Khanzadyan *et al.* 1973: 122.

⁴⁹ Grintser 1988: 683.

⁵⁰ Toporov 1988a: 311-312.

⁵¹ Stolyar 1985: 158, 169.

⁵² Haddingham 1970: 53.

⁵³ Maringer 1960: 71.

⁵⁴ Gamkrelidze and Ivanov 1984: 497.

⁵⁵ Philiposyan 2007: 51.

⁵⁶ Areshian 1985: 25.

⁵⁷ Areshian 1985: 25.

⁵⁸ Santrot 1996: 165.

of the cult and sacrifice – are the Armenian prayers of *gelkap* (spell from the wolf).⁵⁹

According to the oldest Indo-European mythological concepts the world was perceived as a tree or some ritual structure rising to heaven like a tree. The sacred axis growing from the centre of the world like a tree with its roots, stem and the crown was divided to the nether, middle and upper worlds where each animate or inanimate creature or object had been assigned to its place.⁶⁰ The ‘Middle World’ corresponding to the stem of the tree of life unified the gods, people, domestic and wild animals. In Indo-European tradition wild animals of the ‘Middle World’ *Šiunas huitar* were called the ‘beasts of gods’ or the ‘god’s beasts’, as if symbolizing that prey animals belonged to the god, not to humans (opposite to domestic animals).⁶¹ The wolf is among these prey animals.

The beliefs connected with the cult of wolf come from the Indo-European tribes where the gods – guardians of the tribal community had been firstly the elements and the mightiest wild animals distributed at the given geographic area – as the wolf here. Certain Indo-European religious notions had to be expressed through special worship of such forces and the respective rituals. Whatever was full of divine force was sacred that the humans were forbidden to touch. By prayers and sacrifices the people asked the gods of doing something to their benefit or averting any danger or harm. The action of offering or endearing the god and seeking reciprocity in return is in the basis of any sacrifice. In the mythological perception of both Indo-European and other peoples the wolf was basically associated with the tribal totem and combat leader or with the cult of the god of war. The wolf and specifically the wolf pack had a special place in the cult as the symbol of unity. In the Hittite tradition the wolf, particularly the wolf pack played an important role as an embodiment of unity.

The pinnacle of the wolf cult was its being the god of war and the best example is Mars whom, among other animals, wolves (sometimes three-headed) had been dedicated.⁶² Being a subject of worship the wolf was nevertheless annually sacrificed and the sacred relic of that divine creature – its head was kept in the shrine. Beheading during the ritual sacrifice originates from the specific importance of the ritual role of the head. In the Hittite tradition the head was considered to be ritually clean and was offered to deity only, being prohibited to people.⁶³ The wolf sacrifice was also accompanied by dismemberment of the jaws. The rite is known since the 3rd millennium BC (Lchashen, Tomb

123) and evidenced also at the Middle Bronze Age tombs in Sisian.⁶⁴ Some connect the dismemberment of the lower jaw from the skull in the earliest burials with the worship of the ‘dead’, ‘ancestors’, ‘leaders and heroes’.

Wolf sacrifice at Mets Sepasar is equivalent to the sacrifice of the Egyptian Amon when by the same reason a ram was sacrificed not as a sacrificial animal, but as a god.⁶⁵

All amorphous cosmic elements were deemed as contained in the body of the sacrifice, which completed the action of creating the universe. The wolf sacrifice at Mets Sepasar had the same meaning and the blood of the sacrificed wolf was a means of purification, reconciliation with the god and the restoration of cosmic order through reuniting different parts of its body. When the evil forces of the old year try to disrupt the order and bring in chaos the god should apply an act of cosmogony reproduced in the rite. The wolves had been sacrificed on the eve of the spring and were offered for re-instating the cosmic order – ensuring the orderly course of events in the nature.⁶⁶ Fire, smoke, sacrifice, all items and artefacts of ritual usage were a ritual or sacrificial pillar, a single entity that united the parts of the universe. Sacrifices were offered in the centre of the Universe, in the place where the humane world united with that of the divine.

The rite of the wolf sacrifice is not only the oldest evidence of the existence of such cult but also the only archaeological thread leading to the very source of an entire system of intertwining beliefs originating from the mythological perception of life and death by native Indo-European population of the Armenian Highland.

Most interesting among the materials unclosed at the shrine in situ was the coincidence of the number of finds: seven wolf skulls, seven wholesome vessels and six cups covered by cauldron, an arc of seven stones on the adobe floor that limited the sacred ash to the west of the hearth, which emphasized the ritual and symbolic significance of seven in accomplishing the rite of sacrifice.

Ritual significance of ‘seven’ is further corroborated by the architectural solution of the temples both in Borsippa (not far from Babylon), where seven stages of the ziggurat symbolized the seven luminaries and had been accordingly painted black, white, light red, blue, brilliant red, silvery and golden – colours of the planets, the Moon and the Sun, and the golden top of the temple tower was directed to the Sun, while the silvery – to the

⁵⁹ Yeganyan 2009: 72–81.

⁶⁰ Gamkrelidze and Ivanov 1984: 485.

⁶¹ Gamkrelidze and Ivanov 1984: 485.

⁶² Golan 1993: 197.

⁶³ Ardzinba 1982: 66.

⁶⁴ Devedjian 2001: 98; Khnikyan 1993: 131.

⁶⁵ Frazer 1989: 588.

⁶⁶ Yeganyan 2014: 60.

Moon,⁶⁷ as well as the ziggurat at Assyrian Dur-Sharrukin also painted by the same colours.⁶⁸ In E. Khanzadyan's opinion the lamp with seven orifices found at Metsamor was also dedicated to the cult of seven luminaries, which were expected to bring happiness.⁶⁹ Seven is a magic numeral, a sum of three and four, characterizing the idea of the integrity of the universe.⁷⁰ Seven is the number of a special group of gods or mythological characters. The arc made of seven stones which limits the hearth on the west completed the composition on the floor creating the unity of the form, image and content. Considering the rituals performed it should symbolize the sky. By accomplishing the sacrifice of the seventh wolf the phase of the ritual act symbolizing the integrity of the Universe was completed, as well as performed was the function of the shrine.

The accomplishment of the wolf sacrifice at Mets Sepasar indicates to the presence of Indo-European tribes as the bearers of that culture. The fact that this region was populated by Indo-European tribes is corroborated also by linguistic evidence.⁷¹

Thus the principles of building, planning and composition of the shrine at Mets Sepasar had been conditioned both by the peculiarities of the mountainous terrain and the character of the cult bringing with itself a separate architectural solution and shaping a functional branch of architecture, which is specific to the initial phase of the town establishment.

Thus Mets Sepasar towering in the centre of the Ashotsk plateau was deemed to be one of the divine attributes, a peculiar ritual column, on top of which, in the shrine mystic rites and ceremonies mediating before heaven for earth and before the wolf-god who led the dead to the netherworld had been performed.

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⁶⁷ Tseren 1966: 110.

⁶⁸ Khanzadyan et al. 1973: 130.

⁶⁹ Khanzadyan et al. 1973: 130.

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The Agriculture of Western Syunik, Armenia in the Light of Archaeological and Archaeobotanical Data (Preliminary Study on the Economy of Early Yervandid Settlements)

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Abstract: Archaeobotanical materials from three Early Iron Age and Classical Age sites of Syunik (Armenia) – Uits, Shaghat I and Shaghat III, correlating with archaeobotanical materials of the post-Chalcolithic period of the region, displays certain agricultural traditions. The presented archaeological and archaeobotanical information testifies the active engagement of the studied settlements of Iron Age and Yervandid periods in cultivation of cereals as well as high level of their storage and processing. The combined analyses of these data displays the character of agriculture shaped to fit the conditions of local mountainous areas, which in spite of its partiality makes a reliable basis for further extensive study of the economy of Classical Armenia.

Keywords: archaeobotany, cereals, granary, wheat, barley, emmer, Iron Age, Classical Age, Yervandid period

Introduction

The economic system of the Classical Armenia along with its basic and supplementary branches has not yet been subject to a purposeful and comprehensive study.¹ Almost the same may be said concerning majority of archaeological periods of the Armenian Highland, except maybe the period of Van Kingdom.² As regards the initial – Early Yervandid phase of the Classical period (end of 7th – beginning of 5th centuries BC), immediately succeeding the Urartian, the general archaeological and specifically – economic characteristics of the former are still in need of an in depth study.

This situation stems firstly from certain methodological gaps existing in some spheres of the field studies (particularly the problem of archaeobotanical and palaeozoological data collection). Actually during the former exploration of the monuments (especially settlements) relating to all phases of the Antiquity the scientific sampling and recording of the finds belonging to the mentioned period was done mostly episodically or altogether neglected. As regards the in depth study and historical evaluation of the material data (examination, statistical analysis of the sub-regional

and regional peculiarities, fact based analysis of certain branches of agriculture and stock breeding, etc.), no works have been actually performed. This is the reason why the issues of the Armenian economy, particularly – agriculture in the Antique period were studied based predominantly on the limited or sometimes even controversial written sources and represented rather source studies or were sometimes even discretionary.

In respect of filling the gaps existing in this field of the archaeology of Classical Armenia the interdisciplinary studies of the recent period seem to be of special value as the archaeobotanical and palaeozoological data professionally recorded within their frames are included into the general cultural evaluation of certain sites along with the archaeological findings. This labour-intensive process is in its initial phase and does not yet suggest any significant generalizations. However the data already collected are sufficient for gradual coverage of the branches of economy flourishing in certain settlements or groups of settlements.³

The subject matter of this article – Early Yervandid economic structures and archaeobotanical materials⁴ revealed by excavations at two multilayer settlements – Shaghat I – Shaghat III and Uits, in the Tzghuk region of Syunik province of ancient Armenia, the results of which are presented below, is studied basing on the

¹ In recent years the gap regarding certain branches of economy is being gradually filled. See for instance the below mentioned works on wine making and brewing in ancient Armenia: Hovsepyan 2009: 94-112, 2014: 152-153, 163-164; Phalandjyan 1997: 19-33; 2000: 56-60; 2002: 163-175; 2010: 88-96; 2011: 122-125; Petrosyan *et al.* 2015: 36-108; etc.

² Ghasabyan 1959: 77-86; Harutyunyan (Arutjunjan) 1964; as well as Gandilyan 1998: 280-285; Gulkanyan 1966: 265-270; Piotrovskij 1950: 22-31, 34-35; 1952: 16-24, 28-34, 85; 1955: 14-17; 1961: 108-121; Tumanyan 1944: 73-82; etc.

³ Consistent extension of the chronological and geographical frames of such works will enable spreading light on a certain branch of economy in a certain region. The study of each separate craft implies just the same consistent approach regarding in this case the detailed investigation of the sources of raw and production technology.

⁴ Both sites under research are situated in the north-western part of Syunik region, Armenia.

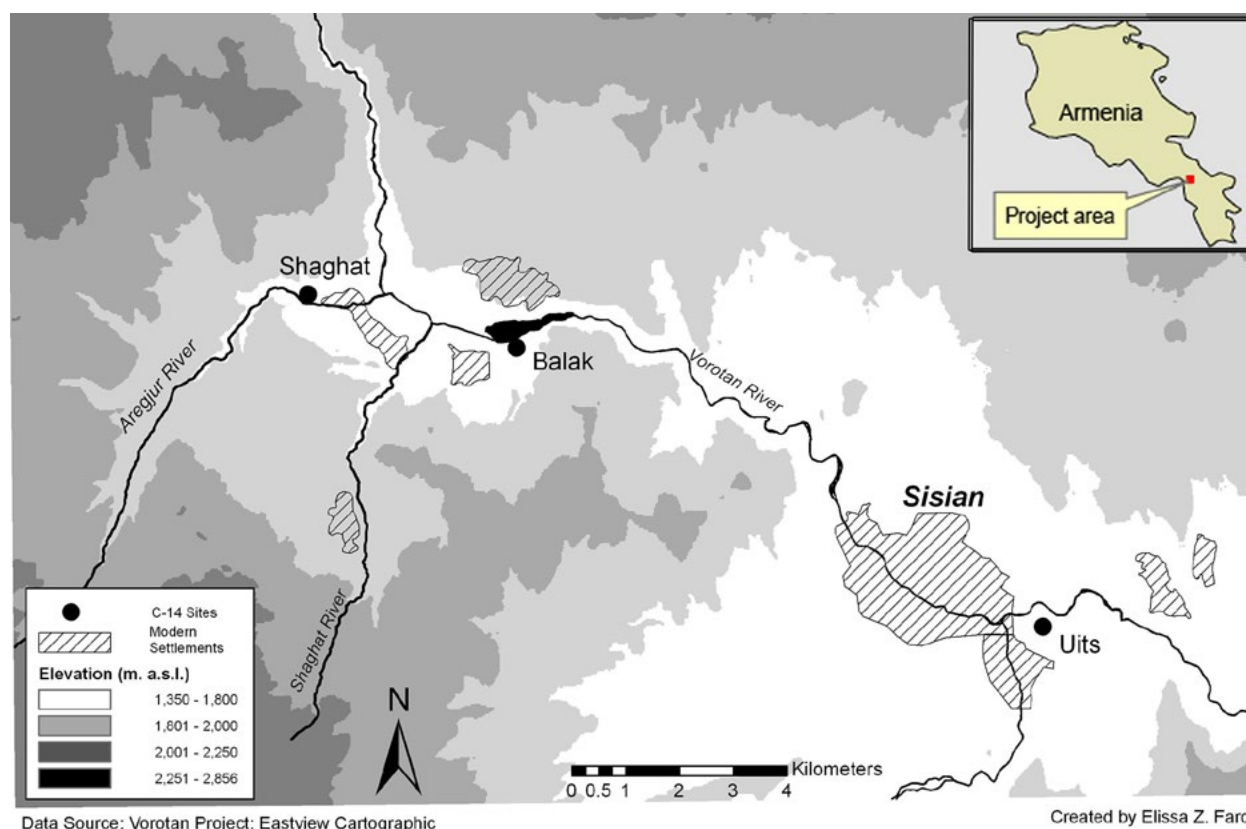


Figure 1

above mentioned combined approach. These sites - quite typical for the given period had been first studied along with other sites in 2005-2008 within the frames of the Armenian-American project 'Vorotan', then - since 2010 - by the archaeological expedition of the Institute of Archaeology and Ethnography NAS RA (Figure 1).⁵

Shaghat I - III (VP. Site # 1&3; 39°34, 8' N, 45°53, 51" E)⁶

The first settlement of Shaghat I - III where the excavations had been conducted in 2005-2007, is situated on the north-eastern edge of the nowadays Shaghat village near the confluence of the Vorotan river and its Arag-Jur tributary. The site occupied the area of about 30 ha including two fortified hills (H - 1785m and 1797m a.s.l.) situated at a distance of 0.5km of each other, and the plateau between them, also included in a fortification system (Figure 2).

⁵ The studies of 2005-2008 had been conducted within the frames of 'Vorotan' project in collaboration of the IAE with Michigan University and since 2006 - with Brown University (Co-Directors of the project - V. Zardaryan, A. Toniakyan, S. E. Alcock and J. F. Cherry). Since 2010 the works under 'Vorotan' project are carried out by IAE (Head - V. H. Zardaryan). See the results in: Alcock *et al.* 2006: 88-89; Cherry *et al.* 2007: 52-71; Hovsepyan and Melkonyan 2008: 329-332; Melkonyan 2008: 149-154; Zardaryan *et al.* 2007: 60-63; Zardaryan *et al.* 2006-2007: 93-96; Zardaryan *et al.* 2010: 152-159; etc.

⁶ The numbering of the sites here and below (Site # 1, 3, 21) complies with the numbering of the monument series in 'Vorotan' project.

The 'valley of Angeghakot' where the site is located is limited on the south by Zangueזור mountain-range, by a chain of hills on the north, and by rivers on the east and west. As compared with other neighbouring micro-regions in the western Syunik this site stands out for its mild climate. The climate plus the abundance of water, fertile soil and pastures (N, S) should have favoured the earliest agricultural development of this area including its various branches (types of non-irrigative and irrigative farming, stock breeding). Vast reproduction possibilities naturally led to the dense occupancy of the valley and adjoining plateaus. Suffice to say that many of the Early Yervandid settlements explored or excavated here (Shaghat I - Shaghat III, Shaghat II, Shaghat IV, Shaghat V, the upper deposits of Angeghakot and Godedzor sites, etc.) were situated within the straight visibility of each other, sometimes even at an 'arrow flight' distance testifying to the sufficient potential of this relatively limited area in terms of providing the livelihood for large masses of population. The inter-regional routes (S-W - Nakhijevan, Iran; N - Syunik, Guegharkunik; E - Syunik, Artsakh) passing through this area should add a new impetus to the development of the local economy.

Excavations at the largest settlement of 'Angeghakot valley' included the citadels on two hills and the area

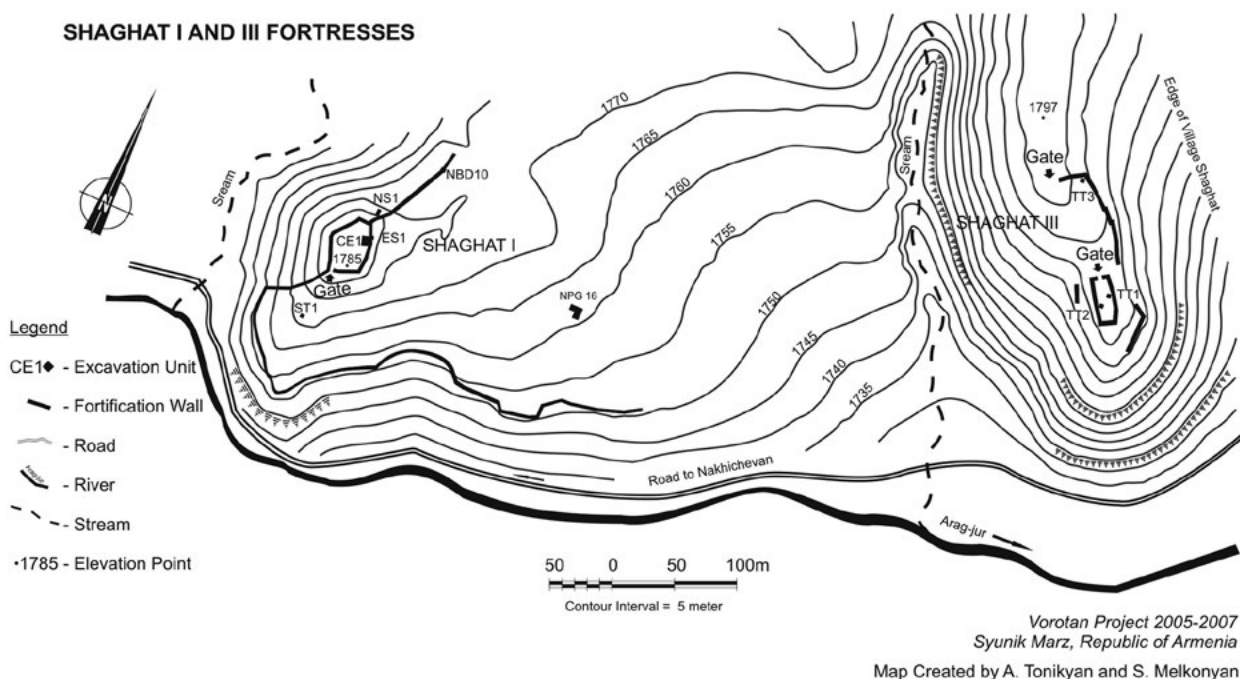


Figure 2

of the settlement between them. According to the data received the first settlement showing the obvious traces of settled life dated from the last phase of the Middle Bronze Age (18th-16th centuries BC). The site was re-inhabited again after a long pause in the Early Yervandid period, during which the settlement reached its maximal sizes occupying the two above-mentioned fortified hills and the intermediate fortified plateau. In the last period of habitation (2nd cent. BC - 2nd cent. AD) the settlement predominantly occupied the area within the fortress walls on Shaghat I hill, while the major part of the neighbouring plateau had been turned to its necropolis.

As mentioned above in the 7th-5th centuries BC this settlement occupied the entire area of the monument. However, despite the presence of some artefacts of the Early Yervandid period, the rocky top of Shaghat I preserved no undestroyed layers relating to the mentioned period, as it had been almost fully cleared by continuous levelling and building works carried throughout the period between the 2nd century BC and 2nd century AD.⁷ Opposite to the top, the layer with structures of the period in question was revealed

on the artificial terraces of that hill. Specifically on the terrace built on a steep northern slope beneath the fortress wall a structure vertically bound to the basalt bedrock was excavated (NS-1). The latter was covered by a regularly laid cobble prop wall serving at the same time a prop wall to a semi-dugout structure. There was a deep storage pit (D - 1.75m, Dia - 0.6m; Figures 2, 4, 5, 6) resembling an irregular pear in section that was cut in the bedrock covered by tramped up adobe floor. This structure like the entire settlement was set on fire and totally destroyed at the end of the above-mentioned period. Destruction here was witnessed by a thick layer of ashes and cinder on the floor, and numerous large stones fallen from the fortress wall above. This very stone fall had also damaged and almost filled the storage pit. Ceramics found there was chronologically tightly connected with the Early Yervandid samples unearthed on the structure's floor.⁸

The walls of the pit had been covered by fine clay plaster as characteristic of the pits for storing grain, and although no archaeobotanical material had been discovered as a result of works aimed at picking plant remains off the soil sediment of the pit, its function left no doubts. The bedrock of the hill consisting of fragile cindery vesicular basalt that ensured quick draining of the moisture from the adjacent layers and its partial

⁷ The same picture is observed in the case of the Middle Bronze layer. Such an archaeological situation is quite typical for multilayer settlements built on the rocky reliefs (Armavir, Artashat, Garni, etc.). The only evidence of the Early Yervandid building activity preserved on the top of Shaghat I is the lower part of the fortress masonry, which judging from its building technique belonged to the mentioned period, later it was restored and used in the next phase of the settlement's existence.

⁸ The belonging of the pit and the entire compound to this period was confirmed by the radio-carbon analysis of the samples taken there. See Cherry *et al.* 2007: 68-71.

UITS AND SYUNI BERD FORTRESSES

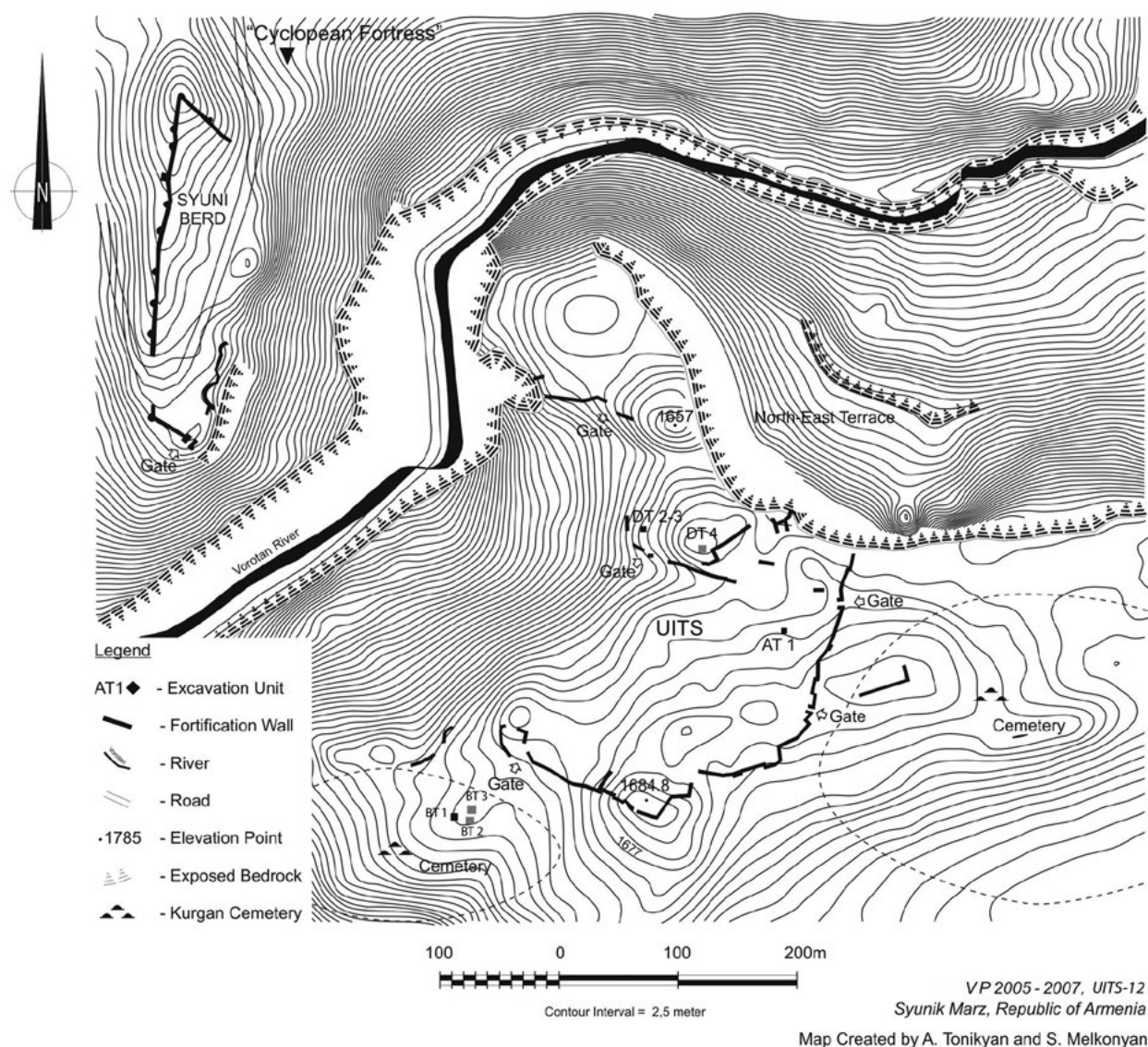


Figure 3

ventilation was also favourable for preserving the stored harvest.

The general destruction of Trench NS-1⁹ did not allow ascertaining the real functions of that structure though judging from the majority of the earthenware represented there by the vessels of economic assignment (*karases*-pythoi, large jugs, etc.) it could be assumed that this structure should have been one of the settlement granaries. At that as witnessed by two simple basalt boat-shaped millstones (without a longitudinal cannellure) found on the floor near the pit the stored grain had been processed in situ.

⁹ It was damaged along with the part of the northern slope of the hill as a result of melioration works carried in the 60-ies of the past century.

Generally rock-cut granaries - quite characteristic of the Armenian Highland and Caucasian settlements, had been in use here since at least the beginning of the 1st mill. BC - the 'ethnographic period' included. Chronological and morphological parallels to the pit at Shaghat I are represented by the pits at the fortress of Tmbadir and in a number of other North Armenian settlements.¹⁰ The prevalence of such granaries in the ancient Near East is also testified by Roman sources.¹¹ It is worth mentioning that the sources emphasize the preference for making such granaries in the northern parts of the settlements (opposite to the residential structures),¹² as seen in Shaghat I. It was

¹⁰ Karapetyan 2003: 21; Yesayan 1976: 54-56, 165.

¹¹ Varro. Rust. I, 57, 2; Columella. Rust. I, 6, 15.

¹² Columella. Rust. I, 6, 10; Vitruv. VI, 6, 4. In respect of the lasting and



Figure 4



Figure 5

obviously connected with the minimum fluctuation of the seasonal temperature on the northern side also favourable for preserving the products stored.

The second pit revealed in the settlement was situated on the summit of Shaghat III, within the boundaries of

stable agricultural tradition the chronological difference between the settlement of Shaghat and Roman sources is irrelevant. Besides, the information of the named authors, particularly Varro, related to Cappadocia – an Asia Minor region, which was tightly connected with the Armenian Highland and Armenian state formations of different periods both by its geographic-climatic conditions and by culture.

the building representing an Early Yervandid 'palace' with the surface of 600 sq. m (TT-2, Figures 2, 7) surrounded by double fortress walls. Small volume of excavations intended to ascertain the chronological scale of settling on this hill did not enable us to explore the entire area surrounding the pit. Nevertheless the material collected gave some insight into the latter. By its structure the pit almost did not differ from that found in Shaghat I. It was cut in a similar bedrock, was oval in section (D – 1.5m, Dia – 0.79-0.85m, max dia – 1.10m), the walls and the bottom were plastered by clay. On the tramped up adobe floor around the pit as well as inside the pit rather large piles of ash and charcoal and a few samples of storage ware of the 7th – 5th centuries were found, which proved that both fortresses of the settlement ended the same way.

Of interest among the artefacts found in the bottom of the pit were its basalt lid, a large mortar also of basalt (broken but complete) and its pestle (Figures 8, 9). At that, if the mortar crafted in the form of a truncated cone turned upside down had been carefully hewed, the pestle represented a long pebble of a matching size (43cm). Its widening working edge bore evident traces of long usage. Judging from the position of those finds the lid broke and fell to the pit as a result of overturning of the mortar. Together with the traces of a huge fire this is one of the episodes showing the fall of the fortress.

The similarity of structure and size of the pits on both hills of Shaghat naturally depended on the similarity of their function. At that in both cases the grain was stored and processed into flour (in the first pit) and to *bulghur* (as in the second pit) near the pits or at least in the same accommodation. There is still another similarity. Judging from the scarcity of the tableware (Shaghat I) or its total absence (Shaghat III) these structures were not assigned for living but served as specialized storehouse barns.

Uits (VP, Site #21; N 39°30'44", E 46°3'21")

The second settlement – Uits represented by a group of monuments occupying the area of about 300 ha, is situated east of Sisian, not far east of the nowadays village of Uits – on a range of hills (H – 1575 – 1684.8m) dominating over the gorge of Vorotan river and the entire environment. This site being inhabited since the Middle Bronze Age had been still existing with some intervals throughout the Early Iron Age (13-9th cent. BC), Early Yervandid, Artaxiad and Arsacid periods (up to the 1st cent. AD) until the Middle Age.

Although Uits is located on a lesser altitude than the area of Shaghat its natural and climatic conditions are much harsher. The range of hills here is helpless against

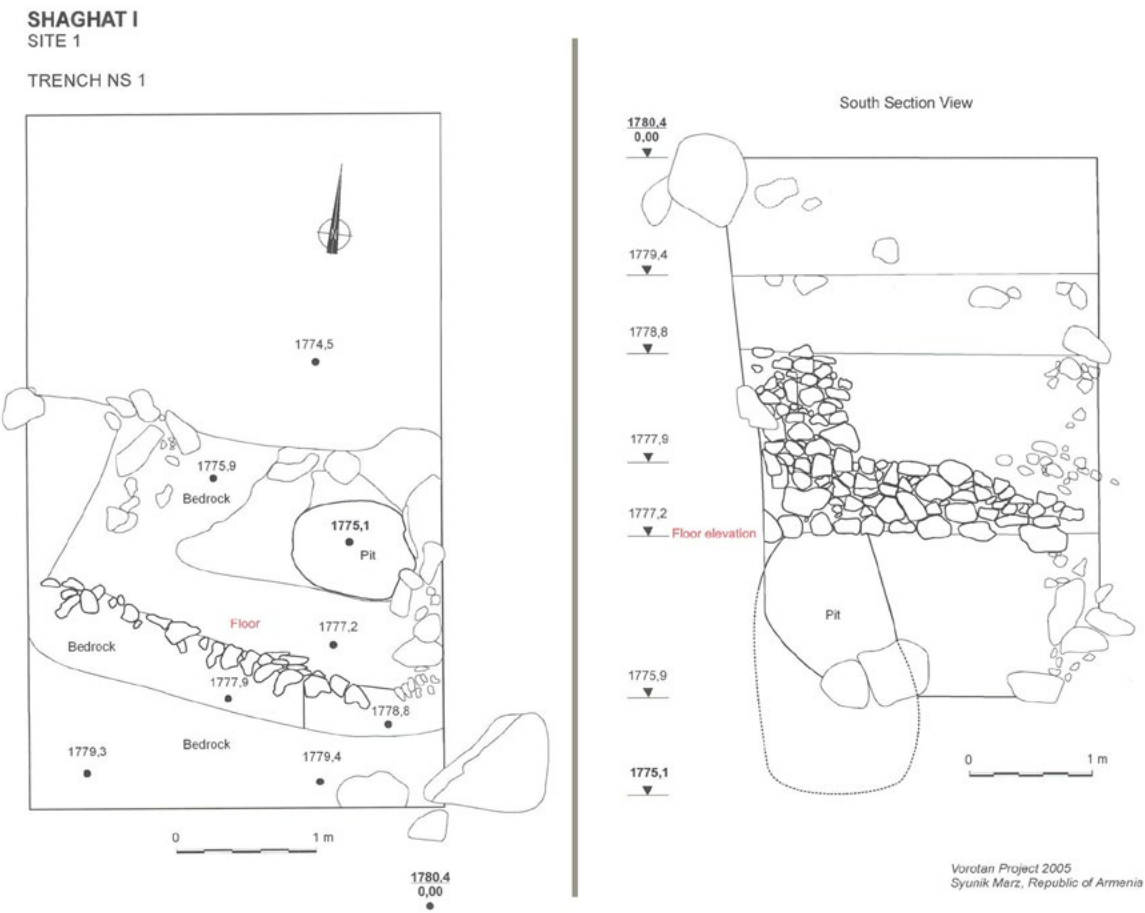


Figure 6



Figure 7



Figure 8



Figure 9

the permanent eastern wind so the local microclimate is characterized by changeability. Steep rocks sloping to the Vorotan gorge on the north and west of the elevation as well as its southern slope with dense diatomaceous outcrops provide no opportunity for cultivation but the vast plateau adjoining the hills on the east and south-east that is fed by meltwater streaming from the Zangezor mountain range is fit for growing mainly grain. The only area needing irrigation in the vicinity of Uits is situated south-west of the hills on the right bank of the Vorotan. As regards the stock breeding potential of the terrain – the abundant pastures of the Zangezor range opposite the plateau should be favourable for developing various branches.

The communication possibilities of the settlements established in Uits in different periods had been undoubtedly great. Actually this range of hills stretching along the Vorotan had been controlling the roads leading from East to West at least since the Early Iron Age.

In 2006-2007 and in 2011-2013 we explored the areas between the first and the second lines of the fortification walls of Uits and part of its south-eastern necropolis (Trenches AT-1, DT-2-4, BT-1-7, Figure 3).

At the south-eastern section of the first defensive line (AT-1) there opened a large dwelling structure of Early Iron Age representing the earliest sample of '*glxatun*' – residential-economic structure traditional in the Armenian Highland (hall and cattle-shed) was excavated. This phase of the settlement's existence is characterized by the maximal extension of its boundaries. The life in the major part of the settlement interrupted at the end of the 2nd Mill. BC and revived again in the 7th-5th centuries BC, focusing on two hills and the adjoining northern cape included into the first fortress wall.¹³ During the Arsacid phase of the Classical

period and in Middle Ages the life here continued mainly in the area of the above mentioned cape.¹⁴

Opposite to Shaghat, the Early Yervandid settlement of Uits is notably smaller than the preceding Early Iron one. Its sizes shrank as if experiencing setbacks including only two fortified hills and an adjoining cape inside the old fortress wall. Nevertheless judging from the volumes and qualitative features of the building activities (particularly, fortification) and other evidence of the cultural heritage of that period the said 'regression' did not affect the status of the settlement or its active economic life.

The above mentioned has been confirmed by the results of archaeological exploration at one of the hills (Area D, Figure 3). The excavations carried in 2007 at the eastern slope of the first hill surrounded by two fortified walls (Trenches DT-2, DT-3) confirmed the dense build up of this area in the Early Iron and Early Yervandid periods.

In 2012 the field work was focused within the fortified wall surrounding the top of that hill, where a 40 sq. m large section of some original building attached to the inner side of the fortress wall build of unworked basalt was excavated (Trench DT-4). To build that wall the ledges of the natural rocks protruding at places were levelled then laid the stone masonry. The wavy bedrock inside the structure was smoothed by a tramped up clay floor. Its entire surface was covered by sooty stones fallen from the walls testifying that this structure was destroyed as a result of fire. Within a single-stratum archaeological context of the structure two storage pits with elaborate 'crowns' and wholesome stone lids preserved in situ were unearthed.

The 'crown' of the first pit (pit #1) was 0.5m higher than the level of the floor. It was made of two layers of stone slabs obliquely set on the round opening of the pit (resembling a truncated cone) closed by a stone lid (Figures 10, 12, 13).

The lid-slab of the second pit (pit #2) rose above the floor level by its thickness only. Opposite to the former its upper part was built of large slabs laid on the opening of the pit as a three-stage false vault, the cross-shaped upper part of which was closed by a separate stone lid in the form of an irregular square (Figures 11, 12, 13).

section of the site explored in the plateau on the right bank of the Vorotan – at the south-eastern foot of the Uits hill range. However these preliminary data are not yet sufficient for the full evaluation of this area in the context of the entire site.

¹⁴ Just in front of Uits there is a notable medieval castle on the opposite – northern bank of the Vorotan gorge, perhaps it is the Syuni-berd mentioned in the medieval sources, which the settlement of Uits had been obviously connected to at the above mentioned period.

¹³ Layers of the Early Yervandid period were present in another



Figure 10



Figure 11



Figure 12

The walls of the pits cut in the fragile cindery bedrock were made of fractured basalt stones fastened by clay mortar and plastered by thin layer of clay. Both pits were 2m deep and oval in section, respectively 1.20 and maximum 1.50m wide. In the masonry of the opposite walls of second pit there were protruding stone 'stairs' fastened on different levels (Figure 13).

Both pits were empty when unearthed. There were only weak traces of some decayed content on the clay plaster. The archaeobotanical examination (see below) of these remains showed that the pits had been in turn used for storing wheat, barley and emmer. Judging from the pits volumes each of them could contain up to 1-2 tons of cereals.

Much like Shaghat, the number of finds at this site was minimal being restricted by mainly a modest assortment of storage ware and five boat-shaped millstones, which once again confirmed that this structure was assigned for storing and production and not residential purposes. At that its geological characteristics (basalt and volcanic slag) and disposition on the terrain (a sole hill looking northwards) had been as favourable for protracted storage of the grain, as in Shaghat.

Noteworthy was the difference of the pits' upper slabs: the first was marquee-shaped, towering above the surface while the second was almost on the floor level with a stepped 'false' vault. The reason of this certainly meaningful difference is yet to be explained. It was hardly made for sorting out the grain species (moreover that it is not confirmed by archaeobotanical data, see Table 1). It is not excluded that along with other considerations different construction forms were chosen to enhance the circulation of people and loads (e.g. sacks or baskets full of wheat) inside the structure.¹⁵ This preliminary version though in need of additional consideration is partially substantiated by the surface examination of the unexcavated western part of the same Trench DT-4, where the continuation of walls of the same construction was traced. They showed that this structure attached to the fortress wall had a rather long but narrow layout. At that given the absence of any crossing partition walls, finding of two other pits in the neighbourhood of the unclosed ones is not excluded.

As it was mentioned above the pits with carefully closed lids were empty meanwhile their surroundings showed the traces of a huge fire and destruction. The juxtaposition of these facts suggests that the destruction of this Early Yervandid settlement (or at

¹⁵ The continuing row of the pit cones in the limited space of the structure would evidently impede the process of the crops storing, while the alternation of the cones and flat covers would twice enlarge the operational area of the barn.

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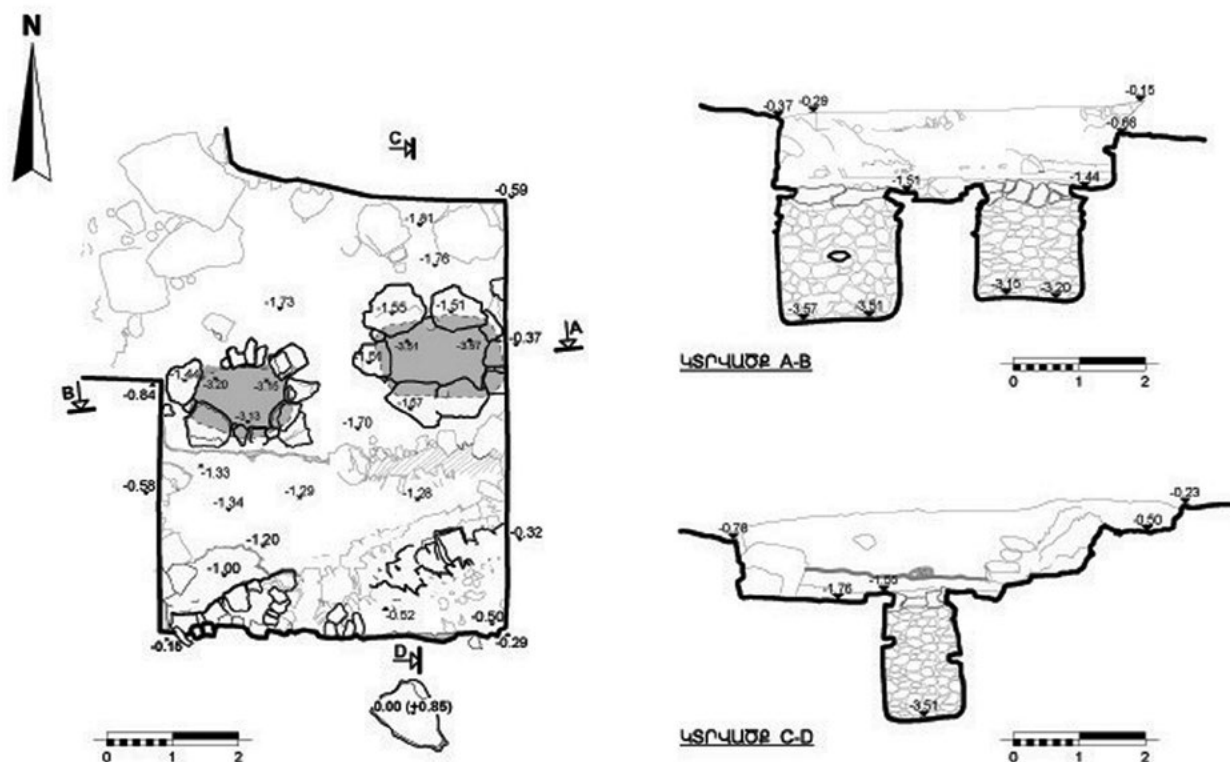


Figure 13

least of its excavated part) had taken place in the period between the complete exhaustion of the last year grain and until storing the new harvest. Consideration taken of the climatic conditions of this terrain and hence the usual time of growing, harvesting and initial processing of the crops (raping, harvesting, drying, storing) the settlement should be probably destroyed in August-September.

It is noteworthy that the evidences of such dramatic events are met in all phases of the two abovementioned settlements existence (Early Bronze, Early Iron, two phases of the Classical period). However the coverage of such events is beyond the scope of this work.

The archaeobotanical finds discussed in this article and presented in the corresponding tables include the materials unearthed from cultural layers of the examined settlements (Shaghat I, Shaghat III and Uits) and represent primary factual data for the study of the agriculture of historical Syunik.

During the excavations within the frames of 'Vorotan Project' the separation of the plant remains from the archaeological sediments was conducted by classical flotation method (through a sieve of 0.3mm apertures).

As a result of the laboratory analysis of the separated mass of plant remains, charred and biomineralized carpological material and numerous fragments of burnt wood were found (Tables 1, 2).

The cultivated plants found in the plain quarters of Shaghat I settlement (Trench NPG-16)¹⁶ consisted of tetra- or hexaploid wheats (*Triticum aetivum/turgidum*), common bread wheat and club bread wheat (*Triticum cf. aestivum* subsp. *vulgare* and *Triticum cf. aestivum* ssp. *compactum*), emmer (*Triticum dicoccum*), cultivated hulled barley (*Hordeum vulgare*), which all present both in the Middle Bronze and Yervandid periods, and small-seeded culinary lentils (*Lens culinaris* ssp. *microsperma*), which is present in the layers where Yervandid period ceramics predominate (by S. Melkonyan¹⁷) (Table 2).

It is worth mentioning that the main cultivars found in the Late Chalcolithic settlement of Godedzor situated in the neighbourhood of Shaghat I-III consisted of the same bread wheat (or soft wheat), free-threshing

¹⁶ Preliminary data about the first archaeobotanical findings from Shaghat were published earlier; Hovsepyan and Melkonyan 2008: 329-332.

¹⁷ Melkonyan 2008: 149-154.

Table 1. Archaeobotanical finds from the settlements of Uyts and Shaghat III.

Site	Uyts	Uyts	Uyts	Uyts	Uyts	Uyts	Uyts	Uyts	Uyts	Shaghat III	Shaghat III	Shaghat III	Shaghat III	Shaghat III
Square	AT1	AT1	AT1	BT1/2	DT4	DT4	DT4	DT4	DT4	TT1	TT2	TT2	TT2	TT3
Sampling Date	27.08.2007	29.08.2007	03.09.2007	05.09.2007	16.07.2012	16.07.2012	16.07.2012	16.07.2012	16.07.2012	24.08.2007	22.08.2007	22.08.2007	24.08.2007	23.08.2007
Locus	15	17	21, Tomb N1	24	Pit N1	Pit N1	Pit N1	Pit N1	Pit N1					
Context	Floor	Floor	Ashy soil from tomb	Jar	Storage pit	Storage pit	Storage pit	Storage pit	Storage pit	Pit	Pit, bottom			Floor
Period	Early Iron Age	Early Iron Age	Early Iron Age	Early Iron Age	Early Iron Age	Early Iron Age	Early Iron Age	Early Iron Age	Early Iron Age					
Dating	13-11 cc BC	13-11 cc BC	13-11 cc BC	13-11 cc BC	13-11 cc BC	13-11 cc BC	13-11 cc BC	13-11 cc BC	13-11 cc BC					
Volume of processed sediments (liter)	3	20	10	3	2.1	3	3	3	3	3	6	6.6	3	3
Concentration of carpological material (unit/liter)	4.0	2.0	0.5	3.3	3.8	3.7	3.8	3.7	3.7	3.3	5.0	7.9	0.0	3.3
Plant taxa	12	40	5	10	8	11	10	30	52	10	0	0	10	10
Poaceae														
<i>Triticeae</i> gen. spp.	grain fragm.	charred	11	34	4	8	-	4	18	10	40	-	-	7
	internode fragm.	charred	-	-	-	-	-	1						
<i>Hordeum vulgare</i> L.	grains	charred	-	4	-	-	-	1	2	-	3	-	-	2
<i>Hordeum vulgare</i> L. (hulled)	hulled middle(?) grain of triplet	charred	-	-	-	-	-	1	-	-	1	-	-	-
<i>Hordeum vulgare</i> L. subsp. <i>vulgare</i> convar. <i>vulgare</i>	hulled left grain of triplet	charred	-	-	-	-	-	1						
<i>Triticum</i> sp.	grains	charred	1	2	-	-	-	-	3	-	-	-	-	-
<i>T. dicoccum</i> (Schrank) Schuebl. (= <i>T. turgidum</i> L. subsp. <i>dicoccum</i> (Schrank) Schuebl.)	grain	charred	-	-	-	-	1	-	-	-	-	-	-	-

<i>Triticum aestivum</i> L./ <i>turgidum</i> L.	grains	charred	-	-	-	2	-	-	-	-	4	-	-	-
<i>Triticum aestivum</i>	grains	charred	-	-	-	-	-	-	-	1	-	-	-	-
<i>Triticum aestivum</i> L.	rachis internode	charred	-	-	-	-	-	1	-	-	1	-	-	-
Rubiaceae														
<i>Galium cf. spurium</i> L.	mericarp	charred	-	-	-	-	2	-	-	-	1	-	-	-
<i>Galium</i> sp.	mericarp	charred	-	-	-	-	1	-	-	-	-	-	-	-
Polygonaceae														
<i>Rumex</i> sp.	nutlet	charred	-	-	1	-	-	-	-	-	1	-	-	-
Boraginaceae														
<i>Buglossoides arvensis</i> (L.) <i>Johnst.</i> [= <i>Lithospermum</i> <i>arvense</i> L.]	nutlet	biomineralized	-	-	-	-	1	-	-	-	-	-	-	-
Poaceae														
<i>Poaceae</i> gen. sp.	elongated grain	charred	-	-	-	-	1	1	-	-	-	-	-	-
<i>cf. Bromus</i> sp. (?)	grains	charred	-	-	-	-	-	-	-	2	-	-	-	-
Chenopodiaceae														
<i>cf. Chenopodium</i> sp. (?)	seed	charred	-	-	-	-	-	-	-	-	1	-	-	-
<i>Unid. Species 1</i>	seed	charred	-	-	-	-	-	-	-	-	-	-	-	1
<i>Unidentifiable/ Unidentified species</i>	seeds?	charred	-	-	-	-	2	1	-	3	-	-	-	-

Table 2. Archaeobotanical findings from Shaghat I settlement (square NPG16, excavations 2006 & 2007).

Locus		20	39&41	41	54	55	56	57	58	59	60	62	64
Ceramics	Total	?	MBA	MBA	Y+MBA	Y+some MBA	mixed:Y+MBA	mixed:Y+MBA	Y+some MBA	MBA	MBA	Y+some MBA	Y
Volume of processed sediments	280	-	4	-	6	73.6	4	-	3	-	57	132	-
Plant taxa Total	3554	1	19	529	54	269	6	526	387	188	893	564	118
Poaceae													
<i>Triticeae</i> gen. spp.	682	-	9	-	28	174	5	1	25	-	185	255	-
<i>Triticum</i> sp.	48	-	3	-	7	3	-	-	-	-	5	30	-
<i>T. aestivum/turgidum</i>	93	-	3	-	9	26	-	-	2	-	9	44	-
<i>Triticum</i> cf. <i>aestivum</i> ssp. <i>compactum</i>	3	-	-	-	-	-	-	-	-	-	3	-	-
<i>T. cf. turgidum</i>	1	-	-	-	-	-	-	-	-	-	-	1	-
<i>T. dicoccum</i>	12	-	-	-	-	-	-	-	1	-	7	4	-
<i>Hordeum vulgare</i>	132	-	-	-	1	24	-	-	23	-	51	33	-
<i>H. vulgare</i> (hulled varieties)	20	-	-	-	-	4	-	-	-	-	15	1	-
<i>Bromus</i> sp.	14	-	2	-	-	3	-	-	5	-	4	-	-
<i>Lolium</i> sp.	3	-	-	-	-	1	-	-	1	-	-	1	-
<i>Poaceae</i> gen. sp. (cf. <i>Hordeum</i> sp.)	66	-	-	-	-	-	-	-	-	-	59	7	-
Cyperaceae													
cf. <i>Carex</i> sp.	1	-	-	-	-	-	-	-	-	-	-	1	-
<i>Cyperaceae</i> gen. sp.	1	1	-	-	-	-	-	-	-	-	-	-	-
Fabaceae													
<i>Lens culinaris</i>	8	-	-	-	-	5	-	-	-	-	-	3	-
<i>Fabaceae</i> gen. sp.1	3	-	-	-	-	-	-	-	-	-	1	2	-
<i>Fabaceae</i> gen. sp.2	2	-	-	-	-	-	-	-	-	-	-	2	-
Polygonaceae													
<i>Rumex</i> sp.	41	-	-	-	-	1	-	-	4	-	18	18	-
Rubiaceae													
<i>Galium</i> cf. <i>aparine</i>	7	-	-	-	-	1	-	-	1	-	1	4	-
<i>G. cf. spurium</i>	44	-	-	-	4	8	-	-	1	-	19	12	-
<i>Galium</i> spp.	26	-	1	-	-	-	-	-	14	-	6	5	-
Boraginaceae													
<i>Anchusa arvensis</i>	1720	-	-	460	-	-	1	330	259	40	447	83	100
<i>Lithospermum arvense</i>	540	-	1	66	1	6	-	194	35	148	34	38	17
<i>Boraginaceae</i> gen. sp.1	3	-	-	1	-	-	-	-	-	-	1	1	-
<i>Boraginaceae</i> gen. sp.2	1	-	-	-	-	-	-	-	-	-	1	-	-
<i>Boraginaceae</i> gen. sp.3	1	-	-	-	-	-	-	-	-	-	1	-	-
Brassicaceae													
<i>Neslia</i> sp.	4	-	-	2	-	1	-	-	-	-	-	1	-

Convolvulaceae														
<i>Convolvulus arvensis</i>	11	-	-	-	-	-	-	-	1	3	-	3	3	1
Apiaceae														
<i>Apiaceae gen. sp.</i>	3	-	-	-	-	-	-	-	-	-	-	3	-	-
Lamiaceae														
<i>Lamiaceae gen. sp. (cf. Salvia/Stachys)</i>	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Malvaceae														
<i>Malvaceae gen. sp.</i>	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Rosaceae														
<i>cf. Rosa sp.</i>	6	-	-	-	-	-	-	-	-	-	-	-	6	-
<i>Species 1</i>	8	-	-	-	-	-	-	-	-	4	-	1	3	-
<i>Unidentified species</i>	48	-	-	-	4	12	-	-	9	-	-	19	4	-

(or 'naked') and hulled barleys, emmer, small-seeded lentils and common pea.

Two samples of soil were taken from the pit unearthed at TT-2 square of Shaghat-III – one – before reaching the bottom, and the other – just from the very bottom of the storage pit (Table 1). The density of plant remains – particularly the cultivars in the sample taken from the bottom is much higher testifying that the archaeobotanical material taken from the pit was *in situ* state. Remains of the cultivars represented exclusively by sometimes fragmented charred seeds of cereal crops were prevalent in the separated archaeobotanical material. These cereal crop remains were mainly represented by fragments that did not enable exact identification of their species or genus. Although we have no proofs that the cereal crops have been fragmented before charring it is not excluded that in this case we are dealing with *bulghur* (boiled and crushed wheat). However identifiable remains, which were also found, proved that the pit contained (perhaps with certain pauses) hulled barley (*Hordeum vulgare*) and soft wheat (*Triticum cf. aestivum*, Table 1; TT-2). Hulled barley and soft wheat have been the most cultivated plants in Armenia since at least the Chalcolithic period. They are especially prevalent for the middle and high mountain zones.

For the purpose of finding the remains of plants being grown in the Early Iron Age settlement of Uits four samples of soil with the total volume of 36 L (Table 1) had been taken in 2007 from the Trench AT-1 and from the south-western necropolis of the settlement (Tomb BT-1). Two samples (Δ 15, Δ 17) were taken from the floor of Early Iron Age *glxatun* excavated at Trench AT-1, the third one – from the ashy layer in the Early Yervandid Tomb #1 situated in the same dwelling (Δ 21). The last sample (Δ 24) was separated from the soil a ceramic goblet in tomb BT-1 was filled by.

In the case of Early Iron Age and Classical period samples (AT-1, BT 1/2) the carpological material was represented mainly by unidentifiable fragments of cultivated cereals grains (57 fragments, *Triticeae gen. spp.*). There were only ten seeds identifiable up to the genus or species. As a result of taxonomical identification of these grains wheat (*Triticum*) was recorded, which was at least partly represented by tetra- and/or hexaploid type (*Triticum aetsivum/turgidum*), cultivated barley (*Hordeum vulgare*) and dock (*Rumex sp.*). All findings of grains and dock seed were charred. A single dock seed seemed to be a weed occurring within the cereal grain mass.

To determine the presence of the plant remains in the storage pits of Uits DT-4 Trench small samples from their sediment fillings had been taken and processed (2.1 L from pit #1 and 3 L from pit #2). The Early Yervandid archaeobotanical samples did not differ much from the Early Iron Age ones; the findings were also scarce, with the same type of preservation and belonged to the same taxa. Present within the number of archaeobotanical finds were the fragments of unidentifiable cultivated cereals (*Triticeae gen. spp. div.*), a small section of the rachis of cultivated cereal (*Triticeae gen. sp.*) and remains of barley (*Hordeum vulgare*) and wheat (*Triticum spp.*) grains. Part of the barley finds belonged to the hulled varieties. Recorded was the presence of hulled six-rowed barley (*Hordeum vulgare* subsp. *vulgare* convar. *vulgare*) as the left lateral grain of the barley triplet was found (Figure 14: 1.2), which has evidently visible hulls. Study of the wheat remains enabled to state the presence of tetra- and/or hexaploid wheat (*Triticum aetsivum/durum*), soft wheat (*Triticum aetsivum s. l.*), which was identified based on the rachis internode and emmer (*Triticum dicoccum*).

The weeds were represented by bedstraw (*Gallium*), gromwell (*Buglossoides arvensis*) and wild poaceous grass (*Poaceae gen. sp.*). Three charred mericarps of

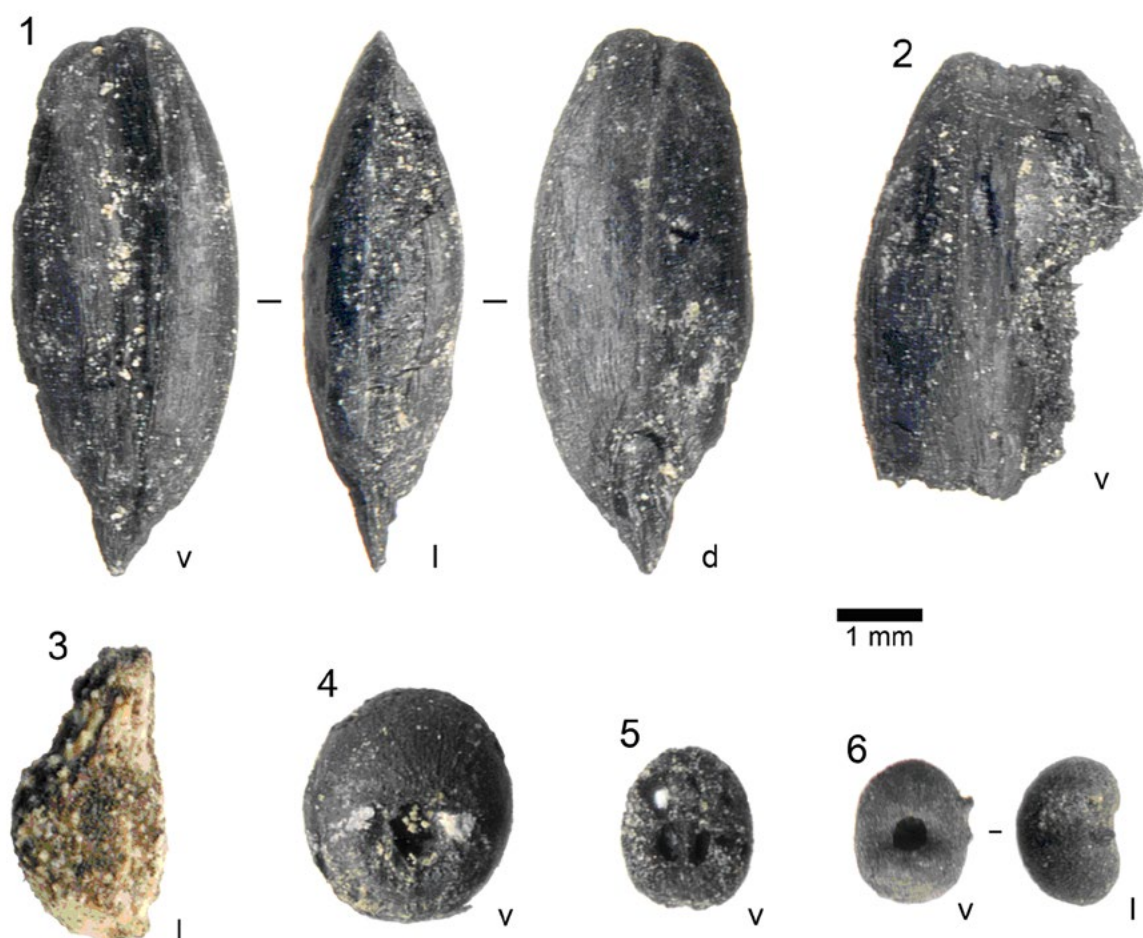


Figure 14. Some archaeobotanical finds from Late Urartian – Early Yervandid dwelling of Uits site (Uits, DT-4).
Taxonomy, findings (organs) and preservatons: 1 – hulled six-rowed barley (*Hordeum vulgare* subsp. *vulgare* convar. *vulgare*) triplet left grain, charred; 2 – hulled barley (*Hordeum vulgare*) charred grain; 3 – field gromwell (*Buglossoides arvensis*) biomineralized ereima; 4 – unidentifiable bedstraw (*Galium* sp.) charred mericarp; 5,6 – false cleavers (*Galium* cf. *spurium*) charred mericarp.
Views: v – ventral side, l – lateral side, d – dorsal side. **Locations:** 1, 2 – pit No. 2; 3-6 – pit No. 1.

two different species of bedstraw (*Galium*) are there (Figure 14: 4-6); two of those looked like a faux bedstraw (*Galium* cf. *spurium*, Figure 14: 5, 6). The field gromwell (*Buglossoides arvensis*, Figure 14: 3) is represented by biomineralized nutlets, and the poaceous grass (Poaceae gen. sp.) by one charred seed (Table 1). The weeds present at the pits in Uits are currently widely distributed in the region in question and are frequently found in archaeological sites from the territory of Armenia. Presence of these weeds with wide ecological adaptation in the pits suggests that in the period under research the vegetation cover around the site did not much differ from the current one and may be characterized as humid steppe vegetation.

It we may see from the information presented above, only cereal had been found from cultivated plants at the archaeological site of Uits. The assemblage of the

cereal crops recorded here is typical for the sites located in the mountainous regions of Armenia – cultivated barley, at least part of which belonged to the hulled variations, which in their turn belonged to multi-rowed subspecies, tetra- or hexaploid wheat at least part of which is bread wheat, and emmer.

Cultivated cereals and weeds revealed in Uits are found also in the cultural layers of other sites of the Early Iron Age, Urartian and Yervandid periods (Karmir Blur, Shengavit,¹⁸ Aramus,¹⁹ Horom,²⁰ Yenokavan-2,²¹ Tzaghkashovit.²²

¹⁸ Tumanyan, 1944: 73-82.

¹⁹ Avetisyan et al. 2005: 211-233.

²⁰ Mirzoyan et al. 1998: 47-49.

²¹ Hovsepyan 2011: 83-84.

²² R. Hovsepyan in Khachadurian 2014; Gandilyan 1997; Hovsepyan 2009

Completing the study of the Early Yervandid household structures and storage pits, as well as the archaeobotanical materials unearthed in Shaghat and Uits, we would like to present their commonalities that led to certain conclusions:

1. Cereal grain storages had been built in the best defended areas of the settlements – within fortification line mainly on the northern side of the hills. Such a coincidence of the terrain would ensure the safety of the provisions both from external threats²³ and from temperature and humidity fluctuations;
2. In parallel with storing the barns served a place where the cereal mass was processed (flour, *bulghur*);
3. Of all available geological layers (clean clay deposits, diatomaceous, basalt layers, etc), most probably consciously, areas with loose slag of basalt were selected – for the best preservation of the grain mass;
4. The pits whether cut in the bedrock or continued by stone masonry had been plastered inside by fine clay mortar and closed by reliable stone lids;
5. As regards the structural differences of the upper parts of the pits in Shaghat and Uits the explanation should probably be sought in the technical specifications of these structures or in the social status of the settlements and not in frames of chronological diversities;
6. The pits' capacities differed within 1 – 2 tons of cereals, which by itself implies (consideration taken that the number of the pits here was not limited by those revealed) large amounts and high productivity of agriculture in the Early Yervandid settlements;
7. Judging from the archaeobotanical data the pits had been periodically used for storing different species of cereals (wheat, barley and emmer);
8. In conformity with the archaeobotanical data during the Early Iron Age and Early Yervandid period the agriculture in Western Syunik (within the boundaries of Tzghuk province) kept to the same assortment of the cereal cultivars. Among the number of other circumstances it might be conditioned by the relative stability of the local climate for at least five centuries studied;
9. The assortment of cultivated cereals present at Shaghat and Uits (Tzghuk province) has obvious parallels with that of found in chronologically comparable sites of the north-eastern Armenia (Tashir, Nig).²⁴ This commonality displayed also in the ways of the cereal grains storing and

processing (see above) was conditioned firstly by the similarity of the geographical-climatic conditions of certain areas in these provinces and the cultural commonality of the population, or maybe by centralized administrative and economic policies relating the main agricultural branches in the Yervandid Armenia;

10. It is possible to find some information about agriculture in Classical Armenia in the simultaneous written sources. Thus, describing the environment that the Greeks had evidenced while retreating through the southern and western regions of Armenia in 401-400 BC Xenophon in his '*Anabasis*' constantly emphasized the abundance of the local agricultural products, particularly fact of the wheat and barley abundance (IV, I (8-9); IV, II (22); IV, III (1); IV, IV (3, 7, 9); IV, V (25, 26, 31), etc). As a matter of fact the situation described by the historian from Athens coincides by a number of criteria with the situation revealed as a result of our excavations. Although the plot of the work mentioned refers to the Armenian provinces (presumably, the direction Korduk-Sanasunq-Khordzean-Derjan) situated at a distance of 250km of Syunik the comparison with the latter is quite justified specifically if we take into account the resemblance of the natural conditions (altitude above the sea level, relief, etc) as well as the commonality of the *modus vivendi* of the local population described by Xenophon to that revealed in Syunik;
11. Returning to the tradition of storing the cereal crops in the pits it should be noted that according to the archaeological data and written sources it lasted in Armenia not only throughout all phases of the Classical Age (Yervandid, Artaxian, Arsacid), but also in Middle Ages. Especially noteworthy in this respect is an episode from Khorenatsi's '*History of Armenia*' dedicated to the destruction of the Kamsarakan princely clan by king Arshak and misappropriation of their property (Book III, 52). The king ordered to convey the entire supply of the cereal grains stored by slaughtered princes in their estate in Nakhjavan (province of Vanand) to the royal fortress of Armavir. At that the stocks were so large that to transport the contents of only two pits they had to use all the carts available in the settlement. The existence of wheat pits with such a capacity in Nakhjavan presumes that cereals were the basic cultivars in Vanand, the geographical-climatic conditions of which for non-irrigative agriculture are comparable with Shirak – famous for its '*Shara's barns*' and Syunik. By the way this very episode by Khorenatsi presumes also the existence of

²³ As witnessed by the above mentioned results of the excavations at Shaghat and Uits the expectations of the population as to being protected from the external threats were not justified.

²⁴ Compare with Table 1; Hovsepyan 2014: 152-153, 163-164; Yesayan 1976: 165.

storage pits similar to those in Nakhjavan in the royal residence of Armavir (and Uits) moreover that the geological volcanic-slag structure of the hill would be favourable for lengthy storage of the cereal grains in the barns.

Archaeobotanical remains found at the sites of Shaghat and Uits are in harmony with other materials of the post-Chalcolithic Syunik displaying presence of certain traditions in this field of agriculture. The quantitative data of these archaeobotanical materials are yet insufficient for the comprehensive perception of the plant-related economy and the details regarding natural environment of these settlements (moreover of the entire region). Nevertheless the available informational canvas testifies that in the periods in question these settlements had been actively engaged in cultivation of various cereals and ensuring their safe storage and processing. The combination of the archaeological and archaeobotanical data displays the picture of agriculture shaped to fit the conditions of local mountainous areas, which in spite of its partiality makes a reliable foundation for further, more extensive studies of the ancient Armenian economy.

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